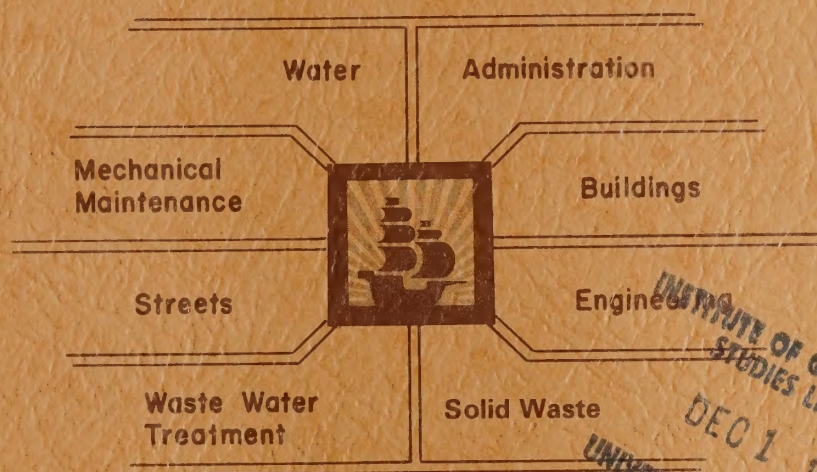


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Department of  
**Public Works**



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**1985-86**  
**Annual Report**

**City of Santa Maria**



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Department of Public Works

November 1, 1986

Mr. Robert F. Grogan  
City Administrator  
City of Santa Maria  
110 East Cook Street  
Santa Maria, CA 93454-5190

Dear Bob:

We transmit this 1985-86 fiscal year report, which is the 16th, as has been the established tradition of this department. Contained in this report for recordation are the significant departmental activities which have occurred during this time period.

We have attempted to include in this report material of statistical and historical value, as well as information of personal interest.

It is appropriate here to express our appreciation to the rest of the City staff for the cooperation and assistance which contributed to our departmental accomplishments. We are even more grateful for the understanding received for our failures. We look forward to the continuing opportunity to make a contribution toward the total City government's service to its community.

Very truly yours,

REESE N. RIDDIOUGH  
Director of Public Works

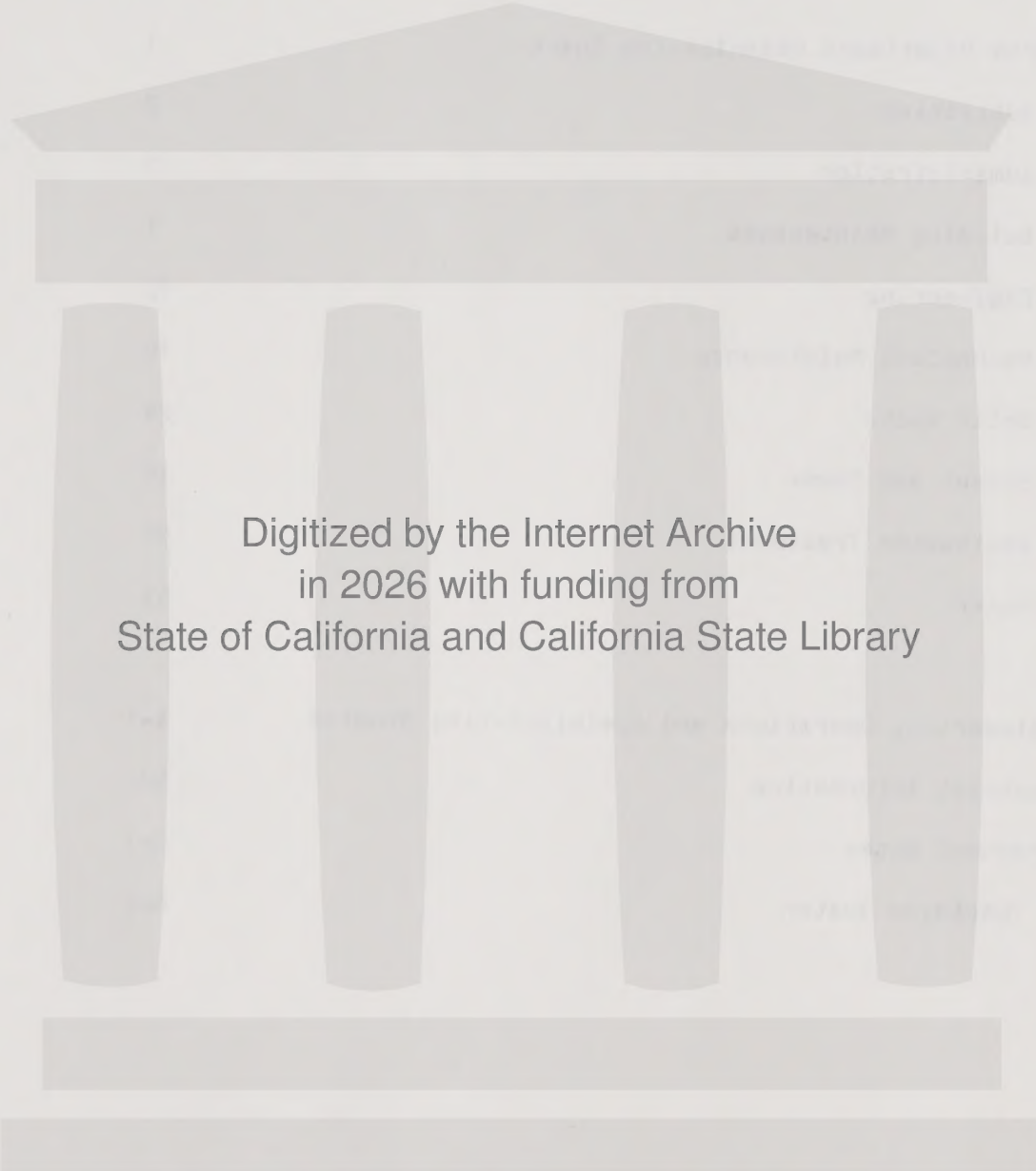
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CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
EXISTING ORGANIZATION CHART

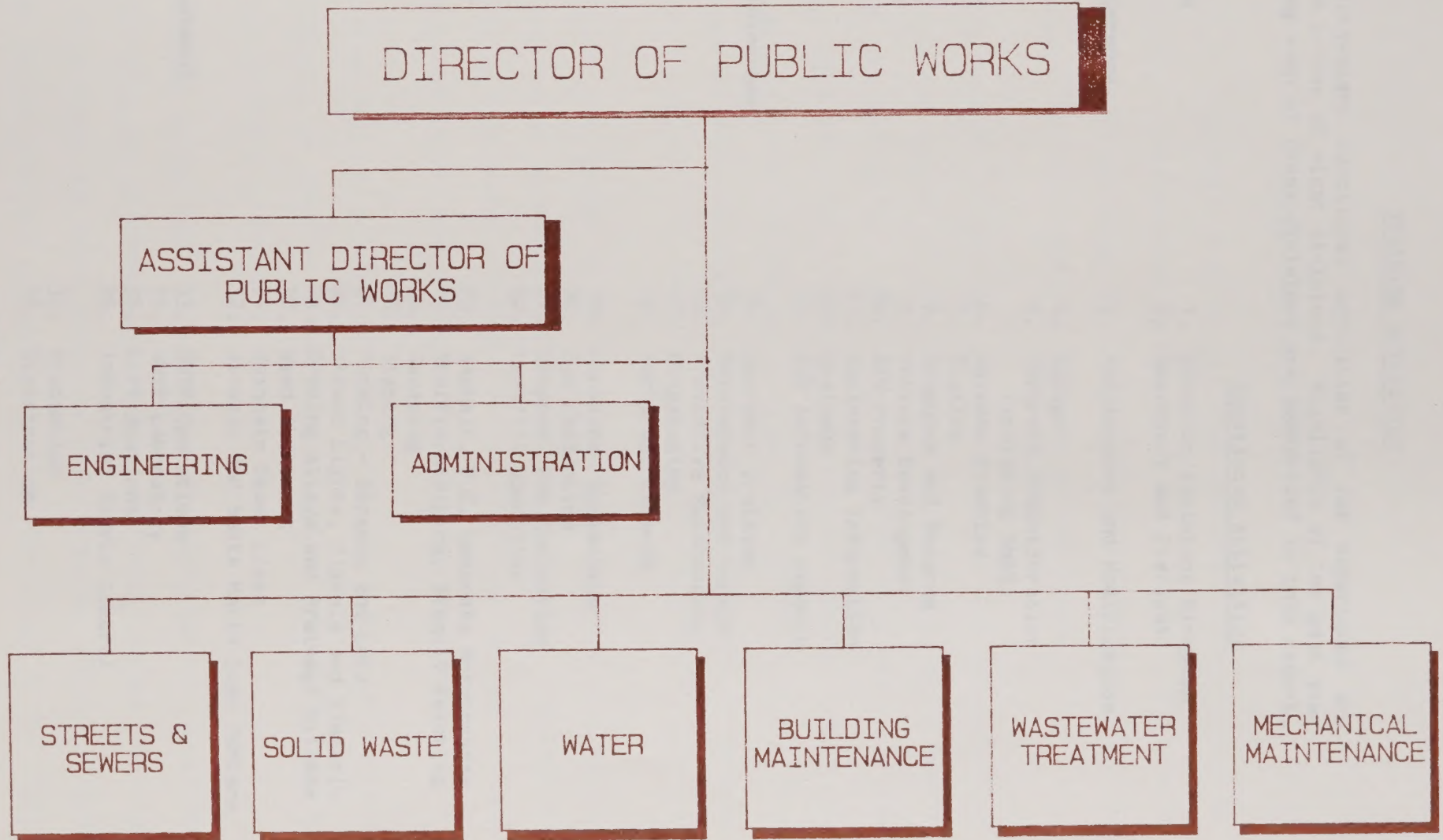


Figure 1



## DIVISION ACTIVITIES

The thirty-eight functional activities of the department are assigned to one of eight divisions. Highlights of the past year regarding each of these divisions are summarized in this report.

| <u>Division</u>        | <u>Functional Activities</u>                                                                                                                                                                                                                                                                                                          |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administration         | 1. Director/Assistant Director<br>2. Secretary and Clerical                                                                                                                                                                                                                                                                           |
| Building Maintenance   | 3. Maintenance and Modification                                                                                                                                                                                                                                                                                                       |
| Engineering            | 4. Design<br>5. Contract Administration<br>(including SMAT)<br>6. Advance Planning<br>7. Traffic<br>8. Graphics and Records<br>9. Private Development<br>10. R/W Property<br>11. Engineering Information<br>12. Drainage<br>13. EIR Information Reports                                                                               |
| Mechanical Maintenance | 14. Operator Training<br>15. Maintenance and Repair<br>16. Preventive Maintenance<br>17. Dispatching<br>18. Parts and Records                                                                                                                                                                                                         |
| Solid Waste            | 19. Container Collection<br>20. Can Collection<br>21. Disposal Fee Collection<br>22. Landfill Operation                                                                                                                                                                                                                               |
| Street & Sewer         | 23. Asphalt, P.C. Concrete Maintenance<br>24. Traffic Striping, Stencil Painting<br>25. Sweeping<br>26. Signing<br>27. Parking - Streets and Lots<br>28. Street Lights, Signals and Electric<br>29. Grading Alleys and Drainage Ditches<br>30. Weed Abatement<br>31. Maintain Sewer Lines<br>32. Stowell and Santa Maria Town Centers |
| Wastewater Treatment   | 33. WWTP Operations<br>34. WWTP Laboratory<br>35. Lift Stations<br>36. Industrial Source Control                                                                                                                                                                                                                                      |
| Water                  | 37. Production<br>38. Distribution                                                                                                                                                                                                                                                                                                    |



### ADMINISTRATION DIVISION

This Division, comprised of three full time employees and two permanent part time employees, is the smallest in the department. However, the role of the Administration Division plays an important part in the success of the programs/services of the other seven divisions in the department.

The primary function of this division is to provide the administrative direction and clerical support of all activities of the Public Works Department, including coordination of Program Planning, Budget Preparation and Control, Personnel Administration, Supervisory Training for Clerical Staff, Administrative Reports, Records Management Program, Investigation and Follow up of Citizen Concerns, Word Processing, and Providing Continuity of Division Activities.

This division contributes to the final decisions in program planning, determining which new or additional projects/services should be initiated and when they should be implemented. Once all facts are gathered for the project, it is included in the fiscal budget request at the appropriate time.

Administration Division reviews and assures that the department's fifteen (15) budget requests, in addition to the 4-year capital improvement budgets, are accurate and completed on time.

During the past fiscal year, Administration has recruited for, scheduled interviews, and processed part time employees in the Administration, Building Maintenance, Solid Waste and Water Divisions. Additionally, payroll changes were processed for 126 full and part time employees who worked in the Public

Works Department during the year. This division has also conducted employee disciplinary action hearings for various employees within three divisions of Public Works and, on a continuing basis, assure that the City's policies and procedures are followed.

Administration also coordinates and schedules reports/recommendations for Council consideration and approval, assuring their completeness and accuracy, and prepares the accompanying resolution/ordinance if required; prepares the Departmental Annual Report with input from the various divisions; prepares, reproduces, and binds public contract specifications for bidding purposes, in addition to all other reports and formal documents that are initiated by the Public Works Department.

This division manages the Records Management Program with assistance and input from the various divisions. Old files are scheduled for retention, storage and eventually destruction in accordance with the time schedules outlined in the Records Manual established for the Public Works Department. Additional files are created as deemed appropriate and purged when necessary.

In January 1986, with the elimination of the quiet work hours (8-9 a.m. and 4-5 p.m.), this division is providing 10 more public service hours per week to respond to citizen concerns and informational requests. Administration staff, being the initial contact with the public, is the first to learn of specific concerns from citizens. After obtaining all pertinent information, an investigation is underway to assist the individual; if it is beyond the scope of knowledge of this division's staff member or if another division staff member may better assist the citizen, the concern is passed on to that individual who can efficiently answer all questions.

In March 1986, Administration Division was authorized the second permanent part time clerk to assist with the heavy workload including filing, reception, and word processing duties which has decreased the processing time of various development reports and other documents and has improved the effectiveness of the clerical staff and the overall efficiency of the Public Works Department.

The department's entire typing workload is accomplished by the use of Word Processing through three computer terminals, connected by telephone line to the Hewlett Packard 3000 main frame in City Hall. This has proven to be a valuable tool to maximize the available staff time and to produce higher quality work; however, there has been a number of inconveniences experienced with the system since the department is not directly connected to the main frame such as line trouble and power surges causing delays and down time.

All Street Encroachment Permits are now issued by the Engineering staff since since they are familiar with the background information leading up to the required permit, i.e. city specifications, development requirements, etc., therefore, this subject will be addressed in the Engineering Division.



CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
ADMINISTRATION DIVISION  
EXISTING ORGANIZATION CHART

DIRECTOR OF PUBLIC WORKS  
REESE RIDDIOUGH

ASSISTANT DIRECTOR OF PUBLIC WORKS

J. FAIR

SECRETARIAL AND CLERICAL SERVICES

SECRETARY II (1)  
Albright

WORD PROCESSING OPERATOR (1)  
Baichtal

\* CLERK (2)  
Gray  
Vacant

\* Permanent Part Time

Figure 2



## BUILDING MAINTENANCE DIVISION

The Building Maintenance Division has the responsibility for maintenance and modification of city buildings. The tasks involve all functions in the operation and upkeep of city buildings within the responsibilities, skills and capabilities of this Division.

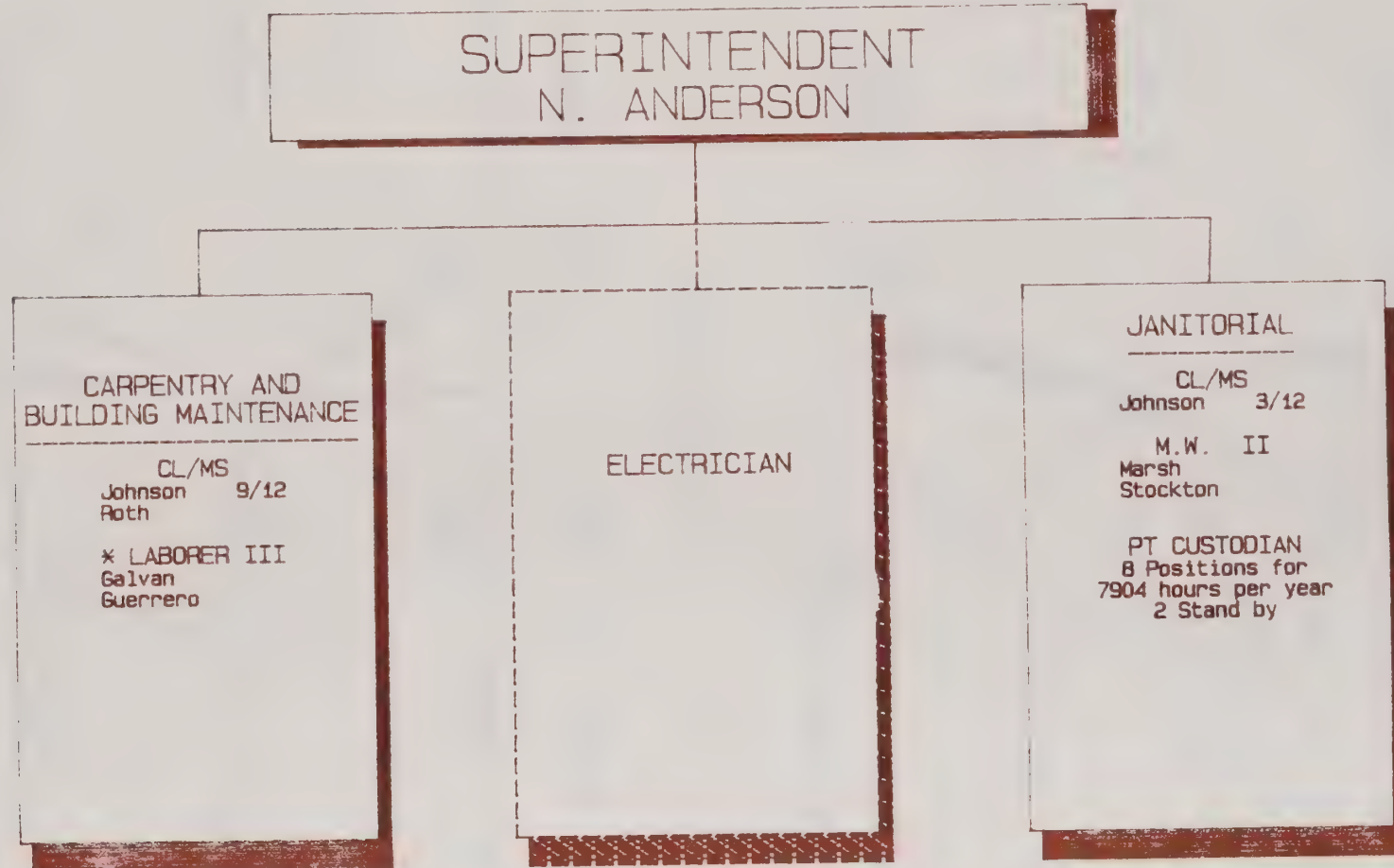
The total tasks completed during fiscal year 1985-86 categorized into materials and contract services amounted to \$29,099.88; \$ 8,744.26 was contract service with 19,505 staff-hours which includes full time, permanent part time, part time custodians and work aides of which 480 man hours were Neighborhood Youth Corps, see Figures 4, 5 and 6.

Highlights of tasks completed for fiscal year 1985-86 were as follows:

1. Painting exterior of Fire Station #1.
2. Installation of conduit and working with contractor on installation of new phone system in all city buildings.
3. Installation of pedestal for statue in City Hall Patio.
4. Installation of stone and plaque in front of City Hall designating this building as a Historical Land Mark.
5. Worked with Redevelopment Agency in maintenance of properties still under rental agreements.
6. Preparation for painting of the Veteran's Memorial Building.



CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
BUILDING MAINTENANCE DIVISION  
EXISTING ORGANIZATION CHART



\* Part-time

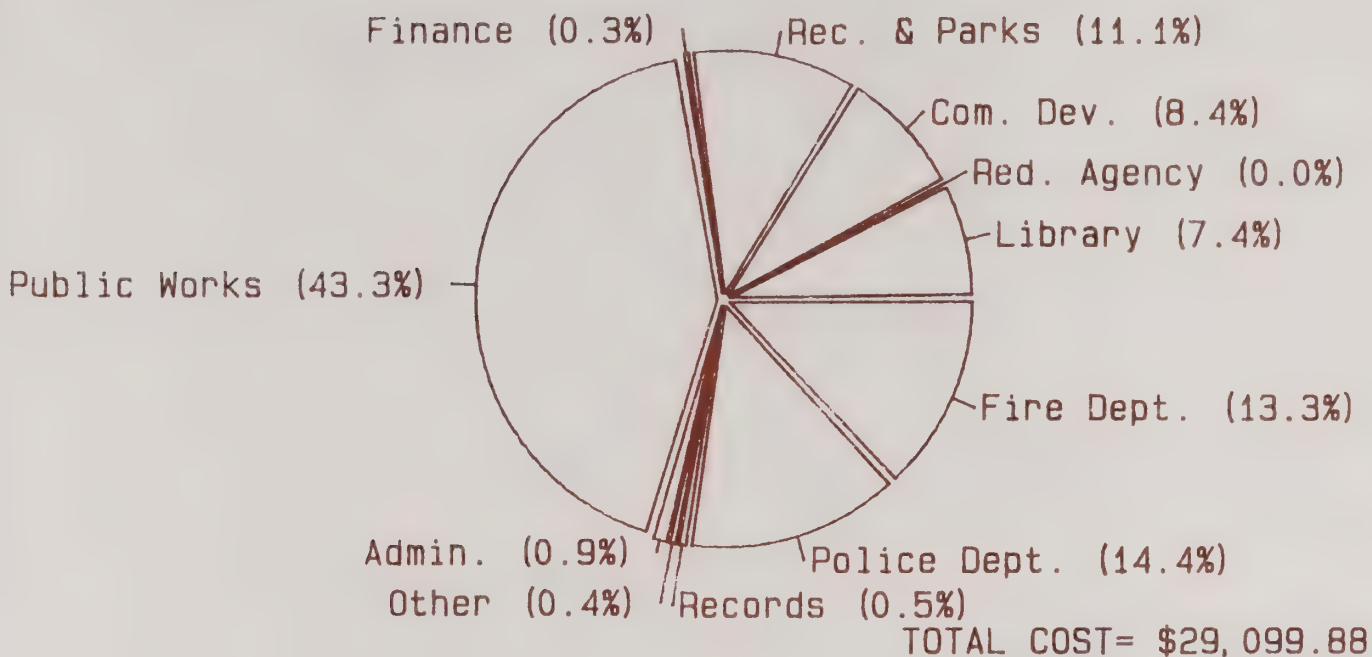


# CITY OF SANTA MARIA

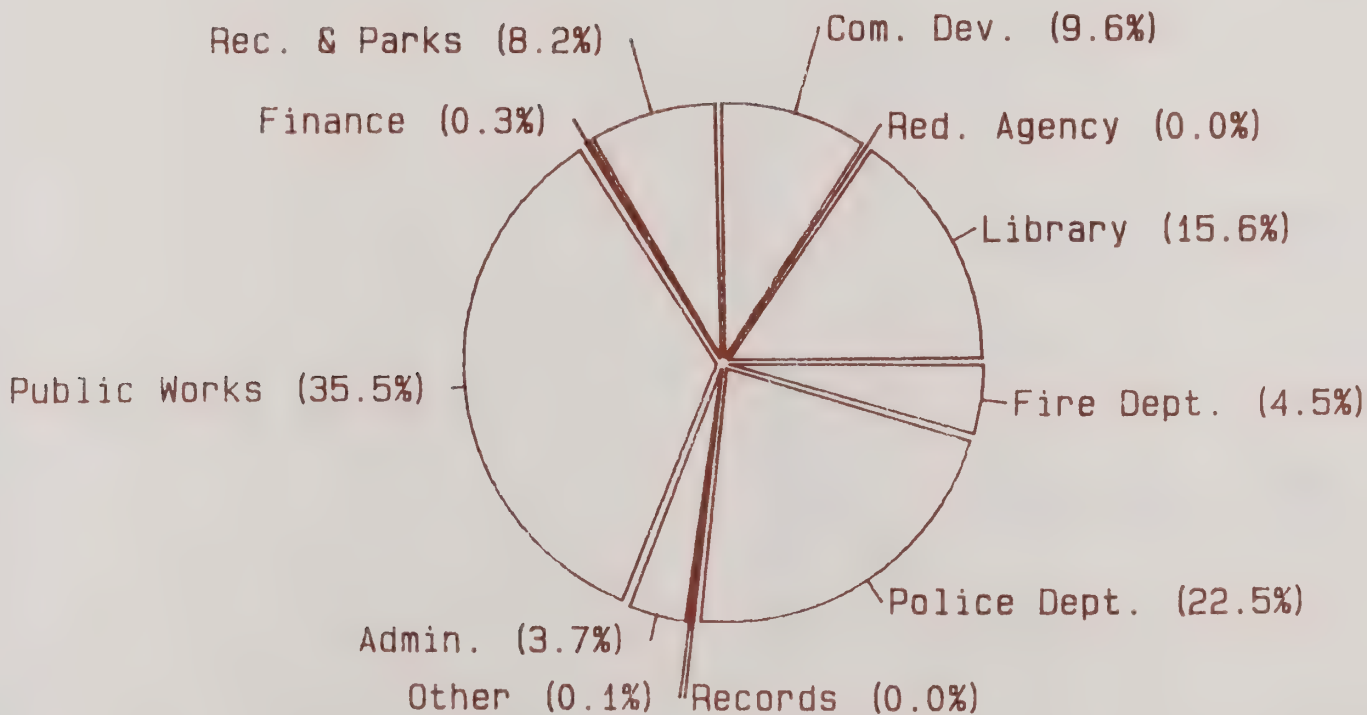
## BUILDING MAINTENANCE DIVISION

### WORK PERFORMED FOR DEPARTMENTS

#### Materials Cost



#### Total Hours



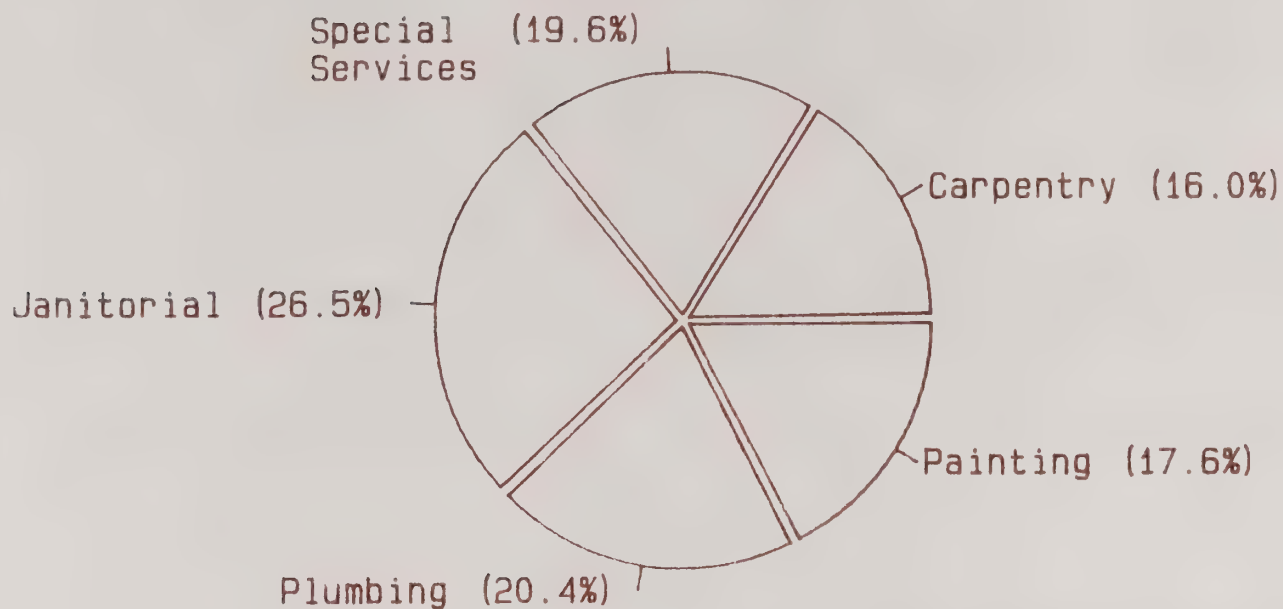
TOTAL= 19,505.5  
(Incl. 717 Borrowed Time)

Figure 4



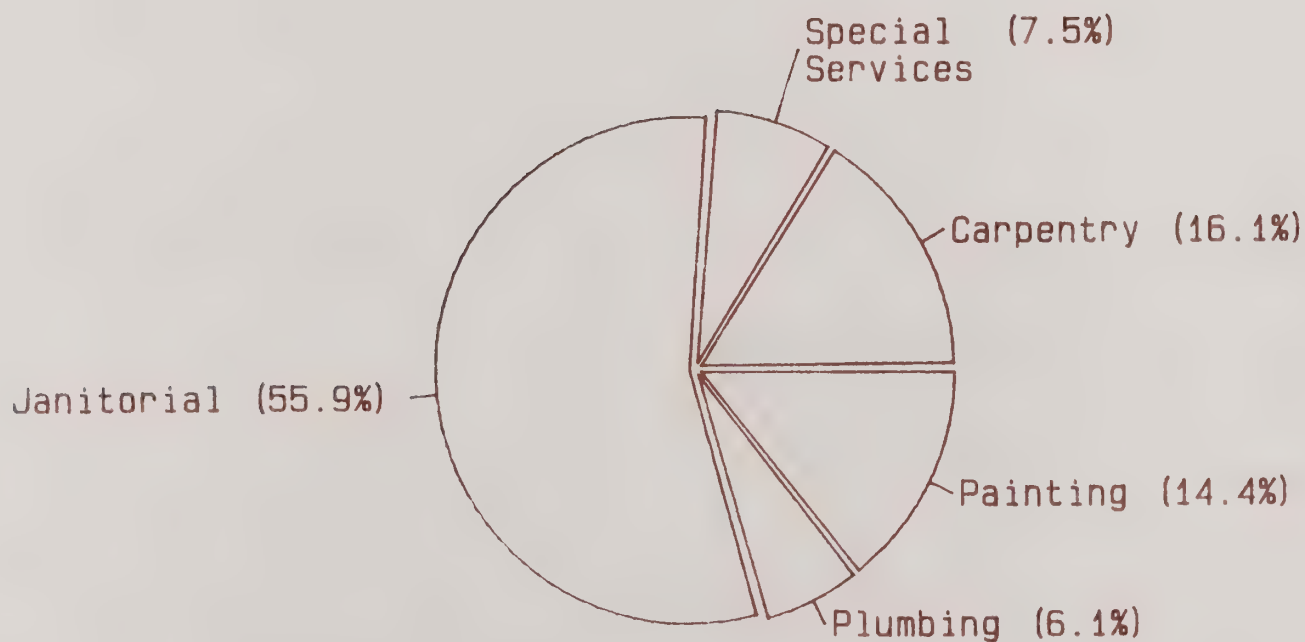
CITY OF SANTA MARIA  
BUILDING MAINTENANCE DIVISION  
WORK CATEGORY PERFORMED

Materials Cost



TOTAL COST= \$29,099.88

Total Hours

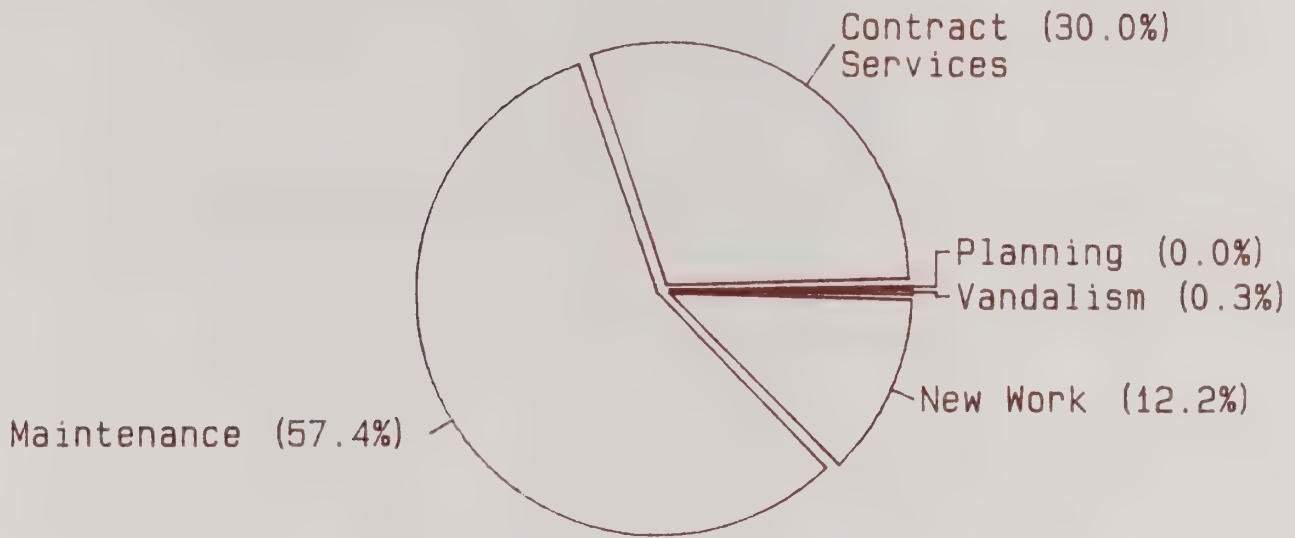


TOTAL= 19,505.5  
(Incl. 717 Borrowed Time)

Figure 5

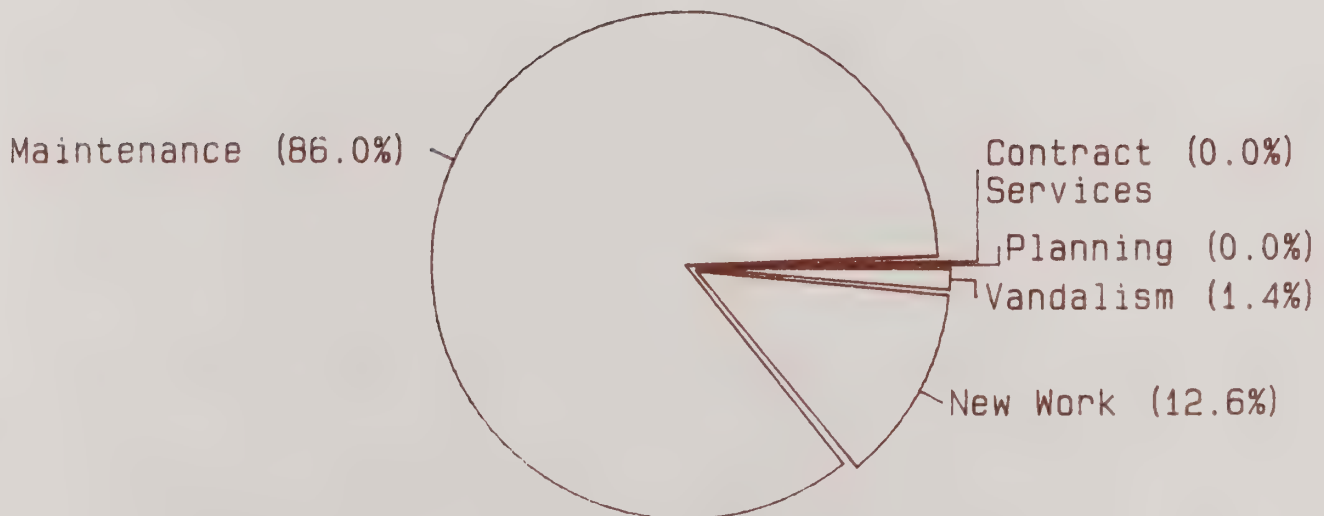


CITY OF SANTA MARIA  
BUILDING MAINTENANCE DIVISION  
WORK TYPE/CAUSE PERFORMED  
Materials Cost



TOTAL COST= \$29,099.88

Total Hours



TOTAL= 19,505.5  
(Incl. 717 Borrowed Time)

Figure 6



## ENGINEERING DIVISION

### Organization and Resources

The Engineering Division provides engineering design and construction services for the construction and maintenance of public improvements. The Engineering Division has a personnel complement of ten full-time employees (including the Assistant Director of Public Works) and one permanent part-time employee. During the reporting year the division was restructured into four sections; Development and Planning, Capital Improvement, Construction Management and Traffic and Transit.

Figure 7 indicates the one change in the personnel complement for the division during the 1985-86 fiscal year. A new Assistant Director of Public Works was hired to replace the incumbent Assistant Director which terminated employment.

Figure 8 shows the major activities of this division, plus their respective approximate costs as a percentage of the total division's salaries. The total amount includes regular, overtime and part-time salaries. This total was \$314,773.65 for fiscal year 1985-86.

Total authorized two year budget (1984-86) for the Engineering Division was \$946,350.00. During 1984-85, the first year of the two year budget, the amount expended or encumbered was \$463,057.00. In fiscal year 1985-86, \$458,927.87 was expended. Total for both years was approximately 97% of the total funds authorized for the two year budget.

### Development and Planning

Private development continued to demand a large portion of the division's available manpower during the past fiscal year. This trend is expected to continue into the foreseeable future. In an attempt to reduce the time required for plan checking and processing and increase the depth of review, the division has assigned an Engineering Aide to assist the Development Engineer position in this activity.

Mr. John Zuspan, the person previously in charge of this activity, resigned in May 1986 to accept a similar position with the City of Danville.

Private development and subdivision activity shown on Figure 8 include:

|                                                           |     |
|-----------------------------------------------------------|-----|
| 1. Building site report for permit application            | 93  |
| 2. Subdivision reports for Subdivision Committee Meetings | 18  |
| 3. Subdivisions recorded                                  | 17  |
| New lots: Residential                                     | 272 |
| Commercial                                                | 5   |
| Industrial                                                | 27  |

As recorded by this office, rainfall for the 1985-86 season was 13.43 inches which is close to the average of 13.66 inches for the City.

### Capital Improvement

Current engineering projects, shown on Table 1, include any project accepted as complete by the City Council during the past year. These projects prior to construction, had a set of plans and specifications prepared or reviewed by this division. Facts included on Table 1 are the final contract amount, dates of Council award and final acceptance, and the percentage of engineering cost for the entire project based on the final contract price.

Three noteworthy construction projects were completed by this division during the past fiscal year. These were: Street Maintenance 1985; Water Line Project 1984; and the Street Reconstruction Project 1984. Their combined final construction costs totaled almost \$1.5 million dollars.

The Street Maintenance 1985 job was the first project generated by the City's new Pavement Management System Program. The program recommended the expenditure of approximately \$500,000 the first year as the initial step in providing a systematic and orderly approach to maintaining the City's paved streets. Although the aforementioned amount was budgeted, competitive bidding brought the project costs in at about \$100,000 less.

Last year's annual report mentioned the resolution of the suit filed against the City by the contractor that constructed the Wastewater Treatment Plant Additions 1979, Bid No. 80/3. The notice of completion for the subject project was accepted by City Council on January 7, 1986, approximately four years after the project was essentially completed. Final construction costs for the work are not included in this year's annual report. This division is still involved in resolving outstanding contract associated change orders with the Army Corps of Engineers. This matter should be completed in the very near future, at which time a final pay request will be submitted to the State. Once the City receives reimbursement from the State, this project which was started in January 1980, can finally be removed from this division's active files.

### Construction Management

This section currently has two full-time inspectors and a two-man survey crew in the field. The high level of private development, coupled with the inspection needs of public works projects, put a severe strain on this division's ability to provide adequate inspection with just two inspectors the past fiscal year.

A decision was made to shift a portion of inspection duties, those involving street encroachment and utility company permits, to the survey crew. The survey crew was able to absorb the additional inspection responsibilities and still keep up with their regular duties that include surveying, collecting traffic and sewer data, and performing soils testing.

Total amount collected for street encroachment permits for fiscal year 1985-86 amounted to \$18,448.15. Total permits issued by the Public Works Department were 152 with one void. Standard Specifications and Drawings, Contract Plans and Specifications and miscellaneous revenue was \$1,948.12.

### Traffic and Transit

Traffic and transit activity shown on Figure 8 includes the staff work for the traffic committee and all engineering related work for developments, design, transit and planning. The traffic committee work consists of field surveys involving both manual and mechanical counts, speed surveys, drafting, accident records and research, monthly meetings and preparation, minutes of meeting, follow-up work and correspondence and reporting to the City Administrator. The engineering staff also participates in responding to required information from claims against the City involving traffic control devices or street and intersection design. Traffic committee activity included:

|                                        |    |
|----------------------------------------|----|
| 1. Curb zone and parking investigation | 23 |
| 2. Speed zone studies                  | 11 |
| 3. Truck complaints                    | 6  |
| 4. Intersection studies                | 24 |
| 5. Miscellaneous traffic controls      | 4  |
| 6. Traffic studies and building sites  | 1  |
| 7. Annual traffic count summary        |    |

As a condition of approval, developments which will generate significant additional trips are required to submit traffic and circulation studies based on existing, new and cumulative traffic projections. The reports are evaluated and mitigation measures are subsequently required by developments to be installed or participate for portions based on their percentage of trips.

Several reports were completed or are in the process of preparation. Some of major importance include the corridors of Blosser Road, Broadway, Depot Street, Miller Street, and Betteravia Road.

The engineering division, in cooperation with the planning division in the Community Development Department, are attempting to consolidate the numerous major studies into a City wide report in order to draft several alternatives for funding mitigation measures. The final report could result in an impact fee for all developments based on trip generation.

The engineering division continued to provide the administrative and management functions for the transit services to Santa Maria Urban Area. During the past fiscal year several study documents were prepared by the Area Planning Council with assistance from City staff and City's transit service provider, SMOOTH. The Short Range Transit Plan was updated as required by the Urban Mass Transportation Administration. This document, along with the Regional Transportation Improvement Plan, provides the information necessary to receive federal assistance of operating and capital funds. The federal assistance applications for 1985-86 included \$176,000 for operations and \$227,200 for capital. On arrival of the capital assistance, the City will purchase three replacement buses and an additional bus for the demand response service. Funds will also be used to purchase a personal computer.

A Service Plan document was also completed this year that will be analyzed during the upcoming year. The study may result in several recommendations to reduce operating costs of the system.

The SMAT system continues to operate with 11 buses which includes 6 on Fixed Route, 2 on Demand Response and 3 for the Special Health service and back-up. The Fixed Route system had 120,868 passengers and 13,146 passengers for Demand Response. The total operating costs for SMAT was \$669,847. The annual statistic report for the transit service system has been included in Appendix A of this report for the reader's benefit.

CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION  
EXISTING ORGANIZATION CHART

ASSISTANT DIRECTOR OF  
PUBLIC WORKS  
J. FAIR

DEVELOPMENT &  
PLANNING

Development  
Engineer  
Zuspan

Engineer Aide  
Rubcic

CAPITAL  
IMPROVEMENT

Project Eng. (1/2)  
Pantoja

CE Tech Insp. (2)  
Ujano  
Kirkpatrick

Assistant  
Draftsperson (3/5)  
\* France

CONSTRUCTION  
MANAGEMENT

Project Eng. (1/2)  
Pantoja

CE Tech Insp. (3)  
Wall  
Palato  
Rios

Sr. Eng. Aide  
Soares

TRAFFIC &  
TRANSIT

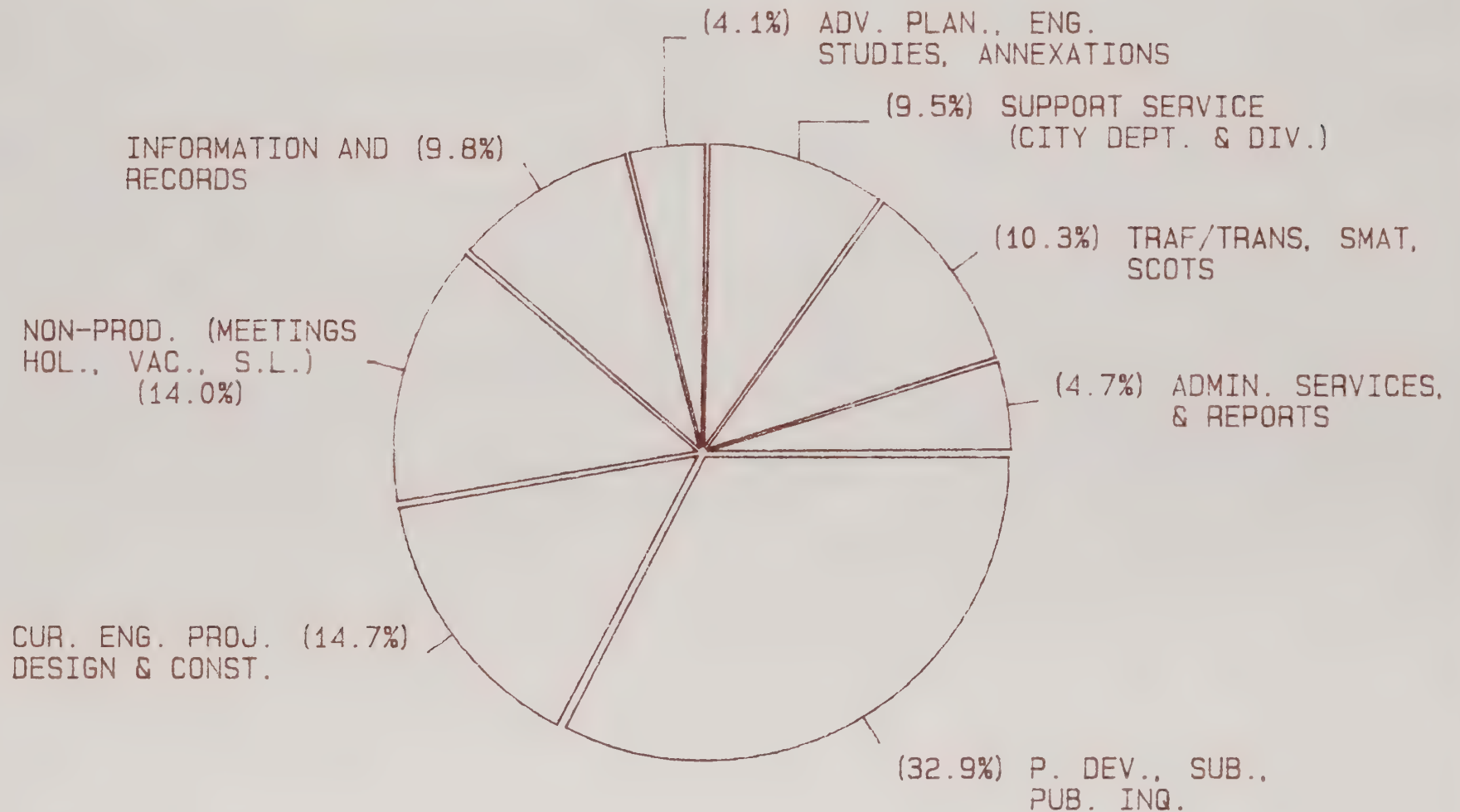
Transportation  
Planning  
Engineer  
Diaz

Assistant  
Draftsperson (1/5)  
\* France

\* Permanent part time



CITY OF SANTA MARIA  
Engineering Division  
Staff hour Assignments 1985-86



TOTAL SALARIES: Regular Salaries, Overtime and Part Time  
1985-86 TOTAL: \$314,773.65



ENGINEERING DIVISION  
TABLE 1  
FISCAL YEAR ENGINEERING PROJECTS

(Project Construction Started and/or Completed  
7/1/85 to 6/30/86)

| BID NO. | PROJECT DESCRIPTION                                                                  | FINAL<br>CONST. COST | COUNCIL<br>AWARD | COUNCIL<br>ACCEPTANCE | PERCENT ENGR/<br>COST/PROJECT | CONTRACTOR                      |
|---------|--------------------------------------------------------------------------------------|----------------------|------------------|-----------------------|-------------------------------|---------------------------------|
| 85/3    | Street Reconstruction Project - 1984                                                 | \$390,313.94         | 2/5/85           | 8/6/85                | 5.38%                         | H.J. Hermreck, Inc.             |
| 85/5    | Chemical Treatment & Test Pumping For Well 6-S                                       | \$33,334.39          | 3/19/85          | 8/6/85                | 0.24%                         | Floyd O. Wells, Inc.            |
| 85/6    | Water Line Project - 1984                                                            | \$608,335.99         | 4/16/85          | 4/15/86               | 4.89%                         | Jamieson Construction Co., Inc. |
| 85/8    | Ceramic Tile Installation for City Hall<br>Restrooms and P.D./F.D. Annex Shower Room | \$16,732.00          | 9/3/85           | 11/19/85              | 1.27%                         | Cecchetto Corporation           |
| 86/1    | Street Maintenance - 1985                                                            | \$408,496.00         | 8/6/85           | 11/19/86              | 0.17%                         | H.D. Peterson                   |
| 86/2    | Elks Field Irrigation                                                                | \$25,618.00          | 10/15/85         | 1/21/86               | 4.32%                         | Dennis Landscape                |
| 86/3    | Veteran's Memorial Building Irrigation                                               | \$15,000.00          | 9/3/85           | 1/7/86                | 25.29%                        | Heritage Landscaping            |
| 86/4    | Traffic Signal Project - 1985                                                        | \$128,060.00         | 9/3/85           | 2/18/86               | 1.09%                         | Lee Wilson Electric Company     |
| 86/6    | Chemical Weed Abatement 1985-86                                                      | 14,949.00            | 12/3/85          | 3/18/86               | 0.23%                         | Olocco AG Service               |



### MECHANICAL MAINTENANCE DIVISION

This Division is responsible for the management of the City's entire fleet of operations vehicles and other similar equipment. The mobile and stationary fleet has approximately 270 gasoline and diesel-powered equipment of various sizes and types. The major portion consists of passenger vehicles and trucks, the remainder includes miscellaneous power equipment from lawn edgers to a Caterpillar D-8 bulldozer.

The maintenance program includes "in-house" minor and major engine repairs, tune-ups, general repairs, metal fabrication, minor body repairs, brake repairs, tire repairs, lubrication and an effective preventive maintenance program. An analysis is performed on each job to assure best overall economy and safety. This has resulted in operating the division with a minimum dollar budget. This division is unique in that it operates as a "pool" rental system for all the mechanical equipment used by all the departments and divisions and entails the development of the specifications for purchasing of same; keeps detailed records for equipment cost analysis and setting of the rental rates for vehicles as well as the City radio communication units.

During the fiscal year, fleet vehicles traveled 1,683,809 miles, an increase of 18.2% from last year, using some 275,812 gallons of fuel, an increase of 12.6% from last year. Service fuel delivery tickets used during this period were 16,560.

The division used 3,160 shop repair orders. This is an increase of 539 over that used last year.

The division used approximately 270 man-hours to assist the other City departments on specialized projects, such as fabrication and welding. The cost of personnel, equipment and material for this service is reimbursed through "inter-departmental" billing.

A budget balance is sustained through revenue from the Pool Rental Program and other reimbursements, as follows:

|                                                 |                              |
|-------------------------------------------------|------------------------------|
| COMM. AND RENTAL                                | \$ 72,240.00                 |
| a. Assigned and unassigned vehicles             | \$2,077,880.00               |
| b. Private party accident insurance             | 2,868.91                     |
| c. Sale of surplus vehicles and equipment       | 30,150.00                    |
| d. State of California gasoline road tax rebate | -0-                          |
| e. Services provided to other agencies          | <u>40,465.92</u>             |
| <b>Total</b>                                    | <b><u>\$2,223,604.83</u></b> |

Police patrol and Santa Maria Area Transit (SMAT) accounted for the greatest miles traveled during 1985-86 fiscal year. Police patrol operated 14 black-and-white units for a total of 381,433 miles or an average of 2,270 miles per unit per month for the 12-month period.

SMAT operated eleven mini-buses during the same period in providing door-to-door, fixed route and health services transportation compiling a total of 473,809 miles traveled for the year or an average of 3,589 miles per unit per month.

The Solid Waste Division operated three pieces of heavy diesel powered equipment at the City's landfill during the fiscal year (D8K Bulldozer, Self Loading Scraper and a 22 Ton Landfill Compactor). As scheduled, the D8K Bulldozer and the scraper were replaced, the D8K was replaced with a factory certified rebuilt caterpillar tractor and the scraper was upgraded from 11 cubic yard to a 22 cubic yard self-loading machine. On an average, these three machines combined consumed 4,216 gallons of diesel fuel per month.

Petroleum dealers are still optimistic that fuel supplies will remain stable; however, as in the past, fuel supply shortages may occur in the future. Therefore, this division will continue to seek fuel saving methods, i.e., down-size replacements where possible, encourage fuel saving driver's techniques (CAM 81-1) and investigate alternative fuels.

Figure 10 depicts man hours for the various segments of this division's work.



CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
MECHANICAL MAINTENANCE DIVISION  
EXISTING ORGANIZATION CHART

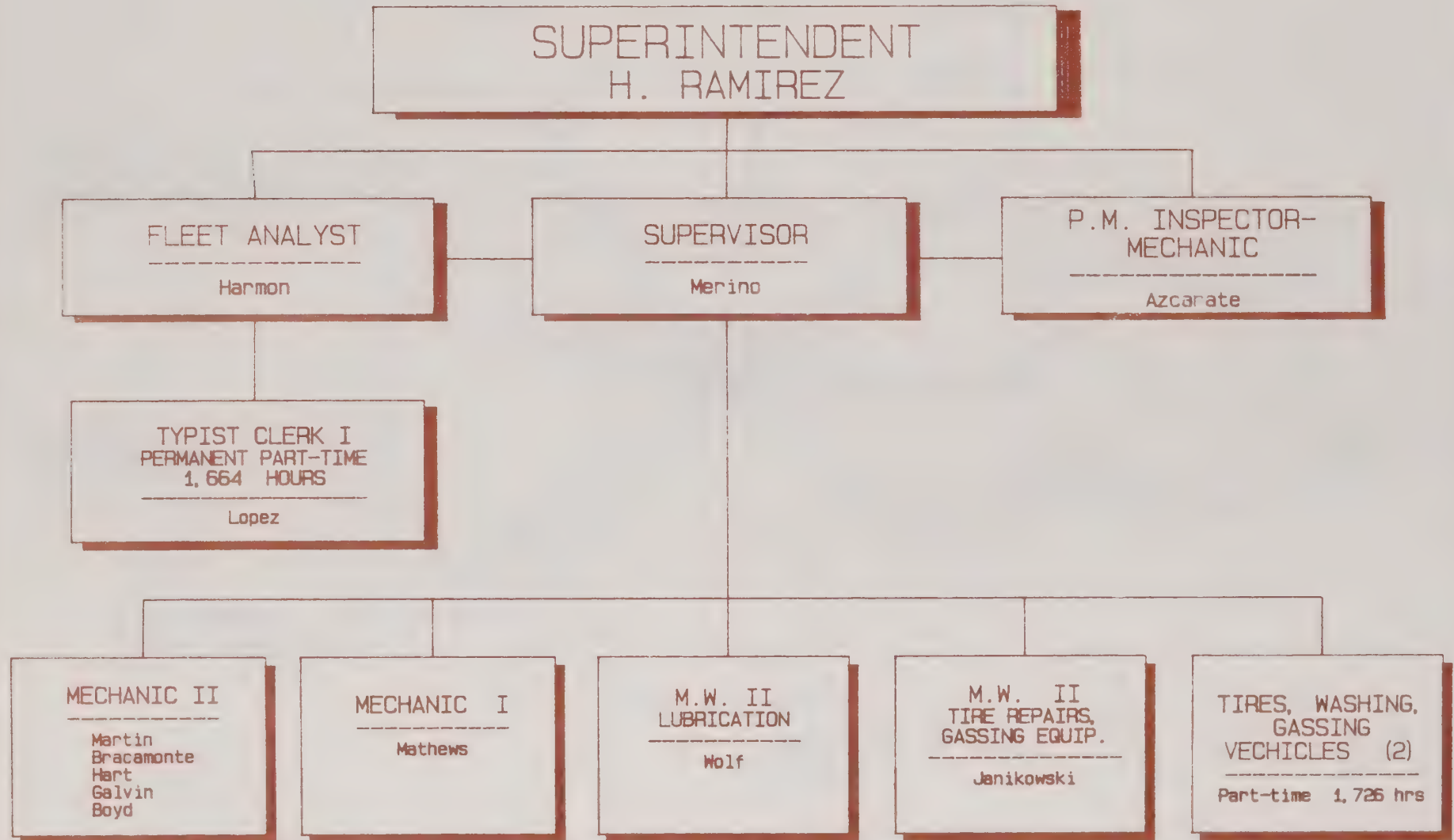


Figure 9

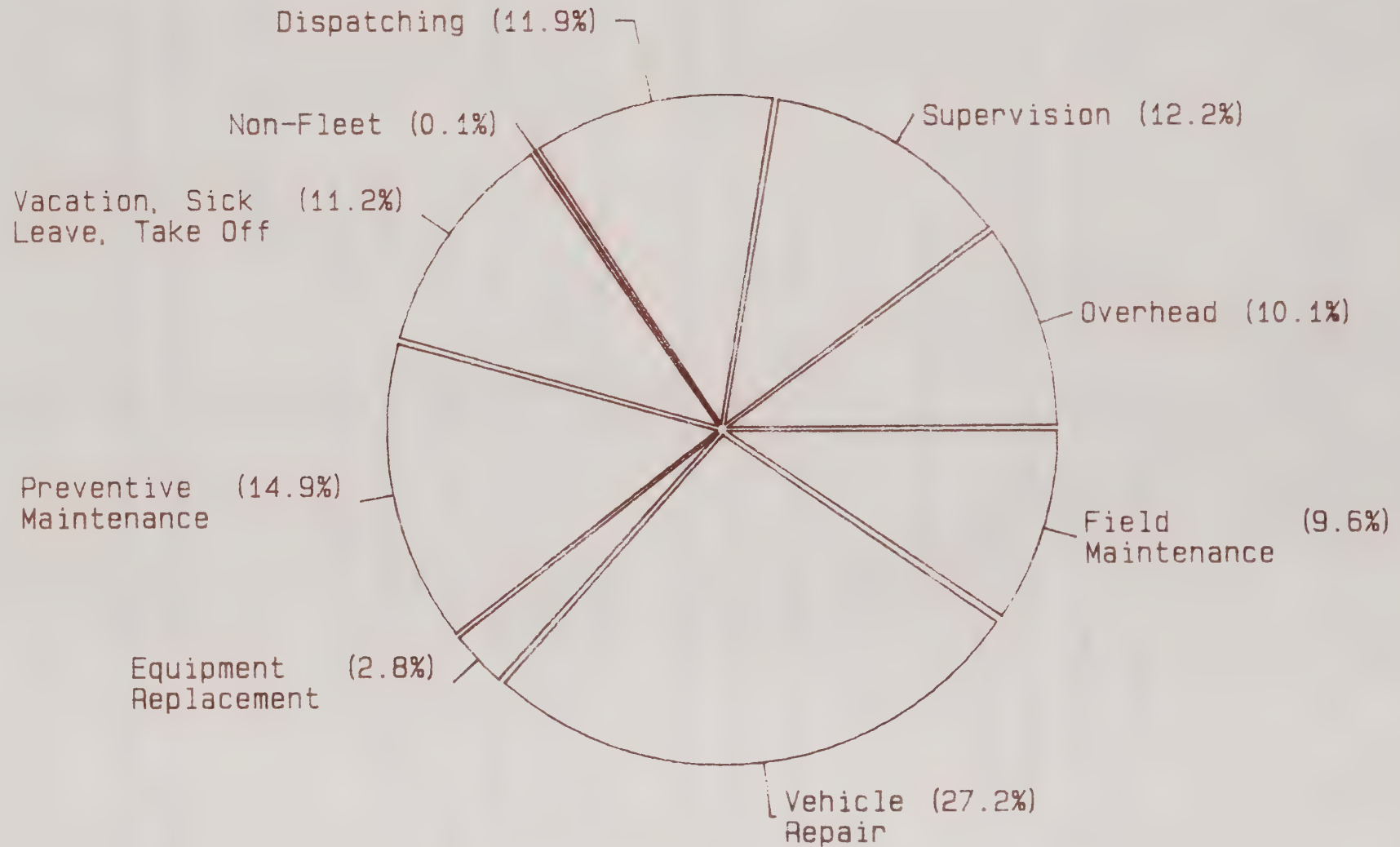


# CITY OF SANTA MARIA

## MECHANICAL MAINTENANCE

Man Hour Chart

1985-86



TOTAL MAN HOURS: 27,567

Figure 10



## SOLID WASTE DIVISION

### Collection

The collection section of the Solid Waste Division is responsible for the collection of mixed refuse from approximately 12,093 residential and commercial accounts (an increase of 6% over last year) using City personnel and equipment. Residential refuse is collected twice each week and the commercial accounts are serviced from one to six times each week.

As of February 1985 the collections are made on Monday/Thursday by one 2-man rearloader crew and seven 1-man sideloader crews. Tuesday/Friday, Wednesday/Saturday by one 2-man rearloader crew and six 1-man sideloader crews. The commercial accounts are picked up by three frontloader drivers.

Since the newspaper program was initiated on February 1, 1974, the program has not progressed as planned. The market has become unreliable due to its fluctuating status. Along with this, it has become increasingly more difficult to find a creditable and reliable buyer. Therefore, the newspaper program has been stopped until an efficient and economical program can be implemented. Endeavors are ongoing to formulate a future program.

### Special Waste Handling Program

Per Administration Directive on August 13, 1985 the Solid Waste Division of Public Works implemented a "Special Waste Handling" program at the city's

disposal site. The program is designed for private citizens to have a location to dispose or drop off vehicle waste oil as well as household paint. By this preventing this type of waste from being disposed of in the landfill.

The following illustrates activities since the start up of August 13, 1985 thru July 1, 1986.

Waste Oil: August 13, 1985 - July 7, 1986 = 1218 gallons received and recycled by Diamond Oil Services.

Paint: August 13, 1985 - July 1, 1986 = 5,080 gallons Labpacks = 254  
Lbs = 64,400 Cost: \$59,147.69

#### Waste Oil

Upon a minimum of 2-55 gallon drums being filled, Diamond Oil Service of San Luis Obispo is notified for pumping out the drums to be recycled.

#### Paint

Upon filling one 4 Cu. Yd. dumpster, N-G Chemical is notified for lab-packing, transportation, and disposal at Casmalia Resources Class I facility.

#### Community Hazardous Waste Collection Day (03/15/86)

City council at their November 5, 1985 meeting approved an agreement with Community Environmental Council (C.E.C.) to participate in a Community Hazardous Waste collection in Santa Maria for a cost of not to exceed \$18,164.45.

Activities as experienced on the March 15, 1986 event, between 10:00 AM and 3:00 PM are as follows:

One hundred fifty (150) persons came out in the pouring rain to dispose of sixty-six (66) 55-gallon drums (LABPACKS) of hazardous waste. Waste collected ranged from paint and paint thinner to pesticides. Six (6) items in the extremely hazardous category were collected including mercury, chlordane and strychrine.

Final cost for the collection day was \$16,241.13.

This event was considered very successful by indication from C.E.C. and other agency's that have conducted such an endeavor.

#### Alternative Collection Methods/System Other Than Presently Practiced.

Following the Budget Committee's review of the Solid Waste Collection Budget (11-51) and realizing a substantial rate increase would be eminent due to a deficit budget, the Budget Committee authorized staff to research alternative residential collection methods/systems other than what is presently practiced.

As a result, administration approved the automation concept as an alternative. Therefore the Solid Waste Superintendent prepared a detailed report and program for budget consideration in 1986-88. See appendix "A".

#### Division Name Change

Administrative approval was given in June 1986 to change the "Sanitation Division" title to "Solid Waste Division".

The title "Sanitation" no longer fit the refuse issues as in the past. The trend shows "Sanitation is being identified as wastewater and sewer responsibilities.

To better identify specific responsibilities and to differentiate specific areas of responsibility, this name change was requested.

Capital improvements added this year consist of 50 new refuse bins purchased for new accounts.

Figure 12 is a comparison of the number of miles traveled by all Solid Waste Division trucks for each calendar year. The 1981 reduction in residential miles traveled is a result of districting of the City for collection purposes along with the balancing of all the collection routes, implemented June 2, 1980. The drop off in miles traveled in 1974 can be attributed to the energy shortage and a resultant change in operation. The increase in 1975 is caused by new construction and, when the new scales were available early in 1975, the Highway Patrol pointed out in the form of a warning, that some of our trucks were overloaded. As a result, more trips were made to the Landfill with lighter loads.

Figure 13 indicates the number of accounts for residential and commercial service over the past 13 years. A point to be noted is the 1979 account figures were taken from the number of water meters in the City which included accounts serviced by Health Sanitation Service. Commencing with 1980, the accounts are actual per computer print out.

Figure 14 shows the total tons hauled for both residential and commercial customers the past 6 years for the calendar year.

### Disposal

The disposal section of the Solid Waste Division is responsible for operation of the City Landfill along the easterly terminus of East Main Street.

This involves the spreading, compacting and covering of all refuse produced in the City, as well as all produced by residents adjacent to the City in San Luis Obispo and Santa Barbara Counties. This also includes estimating small pickup loads and collecting cash or issuing charge tickets for all loads dumping at the Landfill. Some of the associated activities are comprised of constructing and maintaining the access road and erecting fences for the control of blowing paper.

Increases in dumping fees were instituted during the fiscal year; September 1, 1985 + 15%.

Figure 15 shows the acreage used through the calendar years from 1966 to 1985. The variation from a normal increase each year, starting in 1968-69 to present, is caused by the different types of land being used (reuse of the old landfill versus clean land). The reduction in land used in 1975, 1976, 1977 and 1982, 1983, 1984 and 1985 was caused by raising the height of the finished fill higher than in previous years, in addition to the clean land now being used. Increased land usage generally is the result of not going above the levee height to make a contoured hill and increased use of the Landfill by the public. In March 1983, 84 additional acres were purchased adjacent to the existing facility.

Approximately 235.35 acres of clean land are remaining for the existing Landfill operation as of June 30, 1986.

Figure 16 indicates the total number of tons received at the Landfill for the various calendar years since operation of the scales commenced and the average tons received per day for the calendar year beginning in 1980. These

figures are reported on a quarterly basis to the Regional Water Quality Control Board in compliance with Order No. 86-85 adopted June 13, 1986.

Figure 17 indicates the total loads for the year and average number of loads/day received at the Landfill beginning with calendar year 1981.

CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
SOLID WASTE DIVISION  
EXISTING ORGANIZATION CHART

SUPERINTENDENT  
W.F. NOBLE

FIELD SUPERVISOR

Brown

FIELD SUPERVISOR

Montes

HEAVY EQUIP.  
OPERATOR

Cyr  
Lester  
Shearer  
Lodes

ACCT. CLERK

Coleman  
Leerskov

LABORERS

4,160 Hours

FRONT LOADER  
OPERATOR

Anaya  
Limon  
Medrano

P.T. FRONT  
LOADER OPER.  
M.W. II +5%

Carrell 3/12  
Torres 3/12

COLLECTION CREWS  
(R/L & S/L)  
M.W. II

Brown  
Flores  
Hernandez  
Knopf  
Lopez  
Meriot  
Moreno  
Sanchez

BIN MAINT. &  
CREW BACK-UP  
M.W. II

Torres 9/12  
Carrell 9/12

LABORERS

3,800 Hours



# CITY OF SANTA MARIA

## SOLID WASTE DIVISION

### Miles Traveled

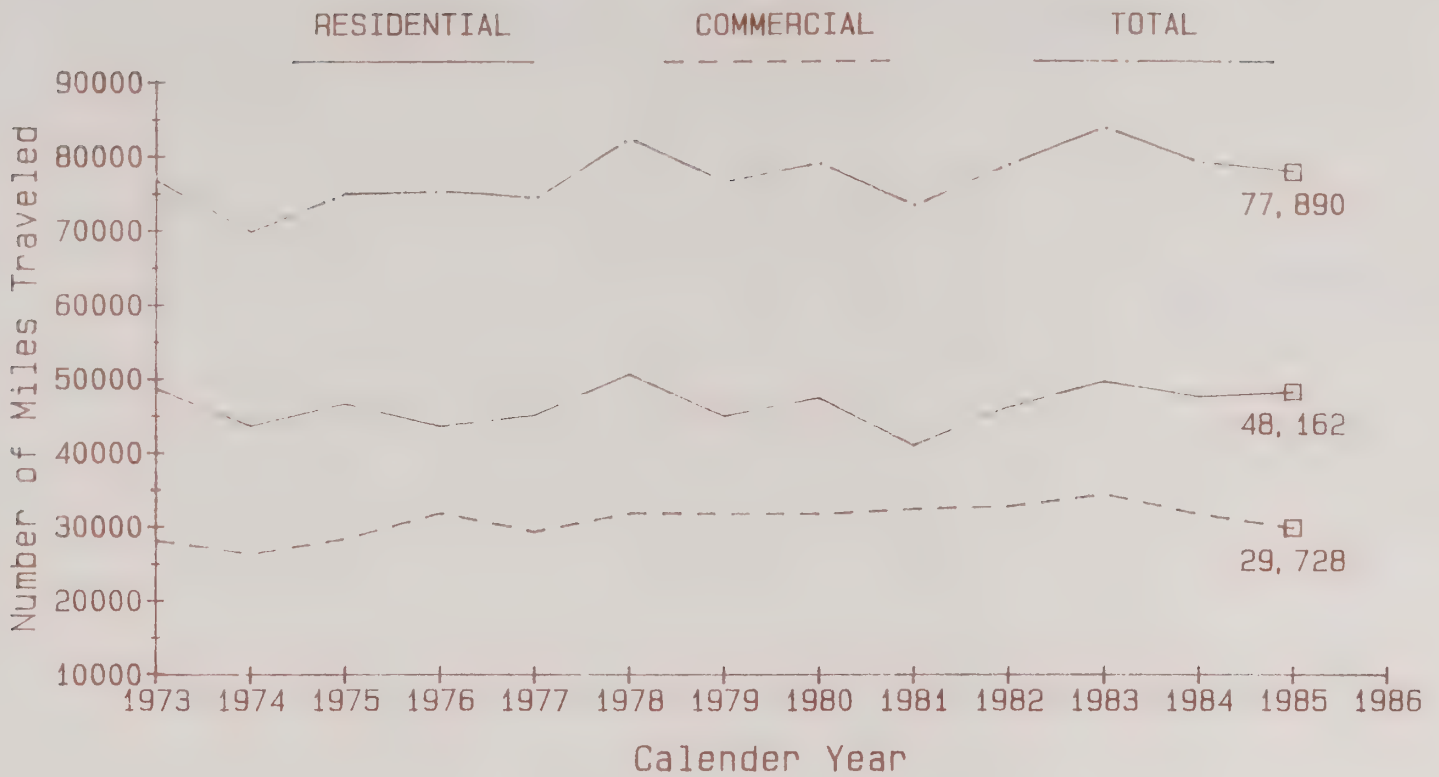


Figure 12

### Number of Accounts

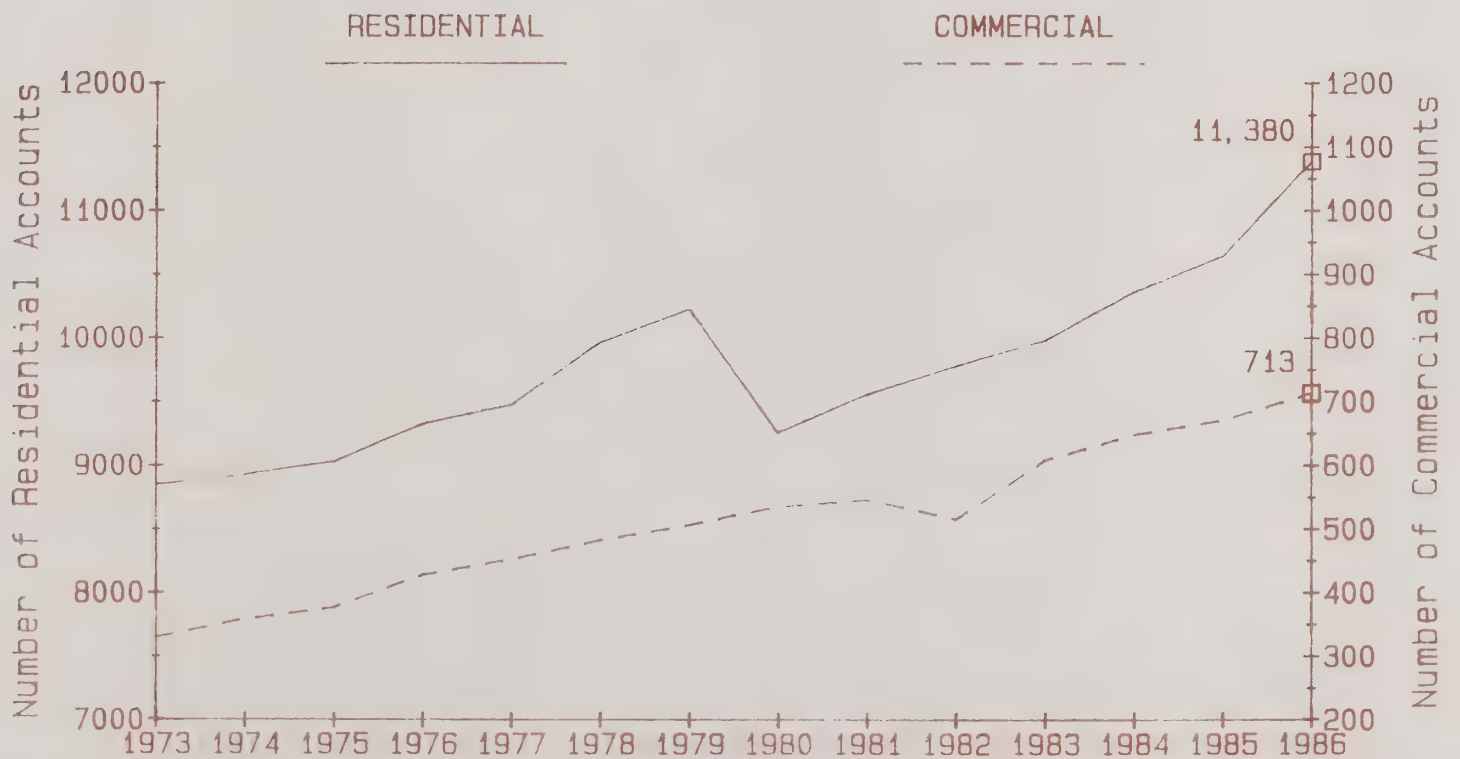


Figure 13

ARSAD (MT-A)



# CITY OF SANTA MARIA

## SOLID WASTE DIVISION

### Number of Tons Hauled

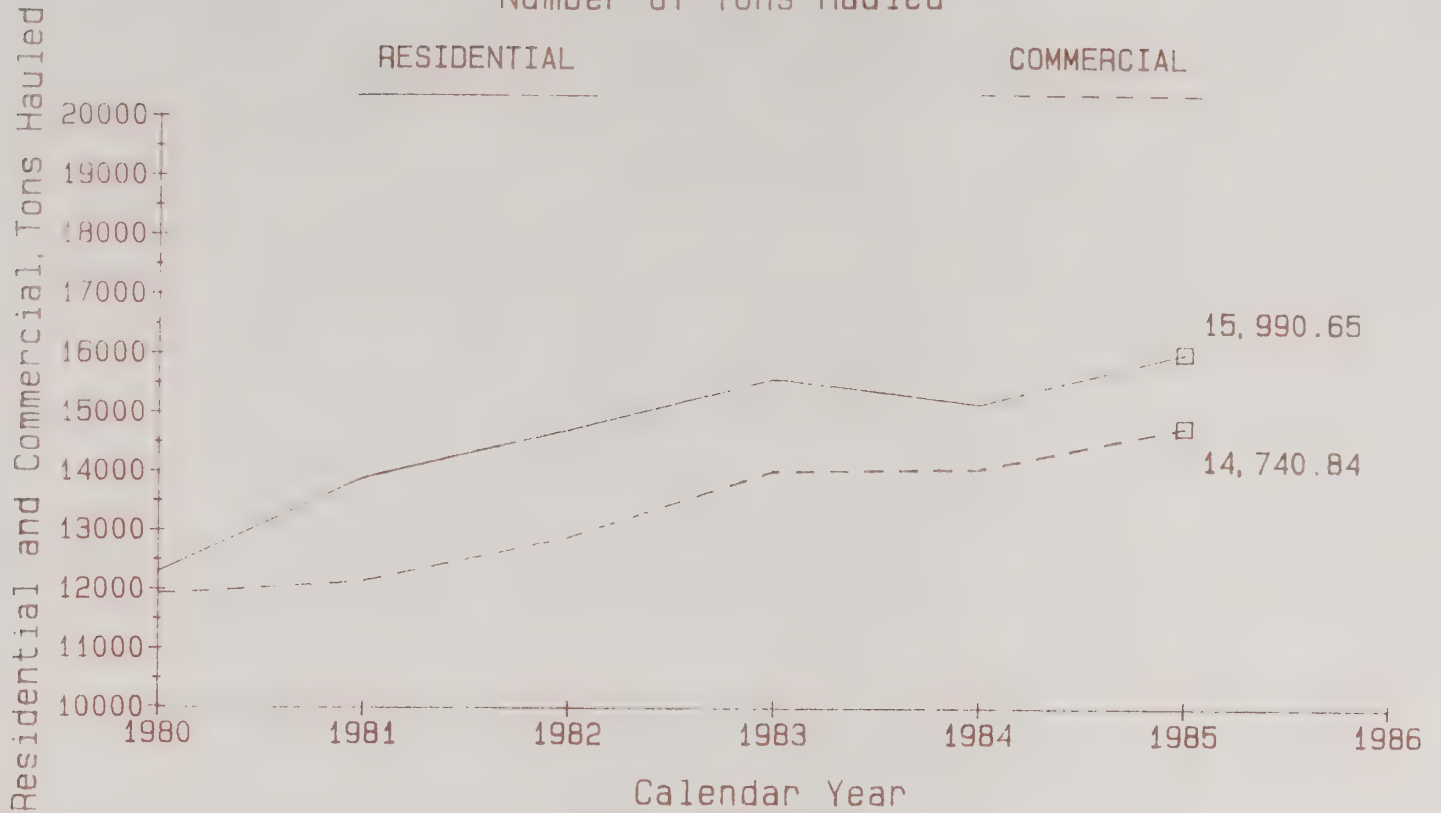


Figure 14

### Landfill Acres Used Per Year



Figure 15

ARSAD (TH-AU)



# CITY OF SANTA MARIA

## SOLID WASTE DIVISION

### Tons Received at Landfill

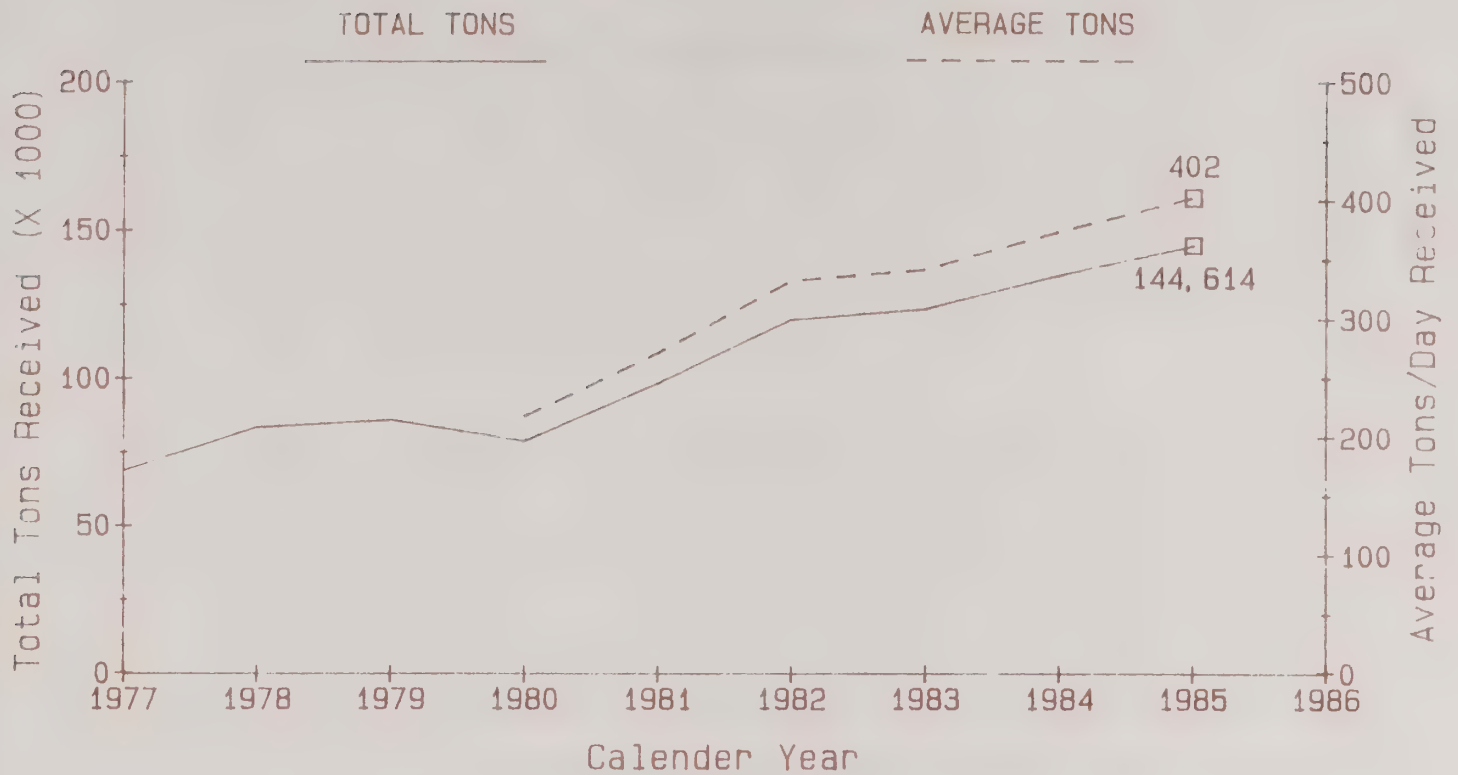


Figure 16

### Loads Received at Landfill

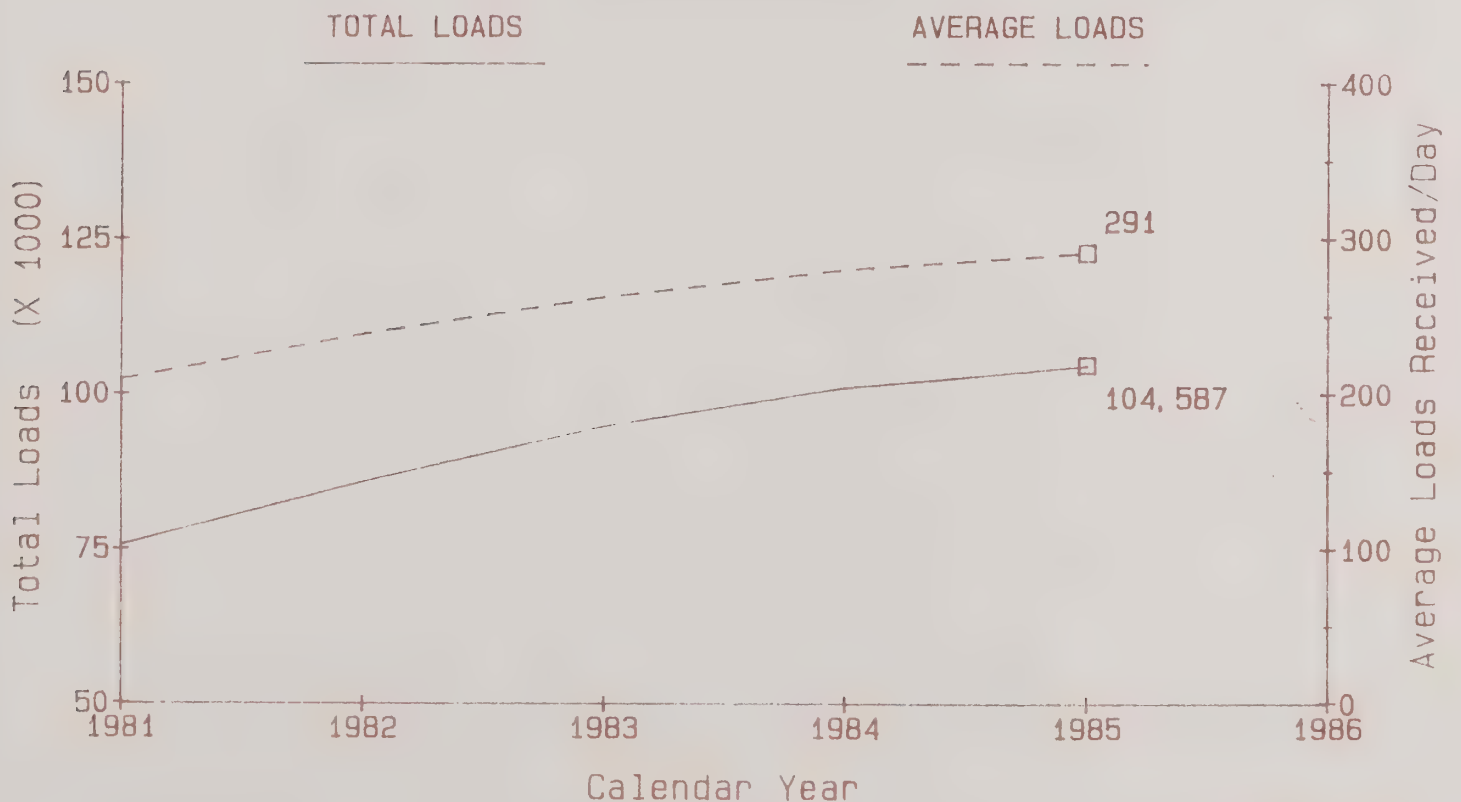


Figure 17

ARSAND (TR-L)



## STREET AND SEWER DIVISION

The Street and Sewer Division is responsible for preventative and regular maintenance of the City streets with appurtenant facilities. This includes emergency maintenance or repair caused by accidents, weather conditions, settlement or other unusual unexpected damage.

The developed Pavement Evaluation and Maintenance Management System enable the Street Division to maintain the approximately 335-lane miles of streets within the City system, using the latest pavement management and computer techniques. Prepared reports summarize the present and future condition of flexible pavement and suggested cost-effective maintenance strategies, as well as total cost for maintenance and/or repair of the City's pavement system.

The degree and type of maintenance for each street or portion thereof in the total City street system is determined by the Street Superintendent taking into consideration Pavement Evaluation and Maintenance Management System reports and monies available.

High on the priority list is proper scheduling and planning of routine preventative maintenance procedures in order that any inconvenience to the public is kept to a minimum. Every effort is made to speedily correct hazardous conditions, which interfere with the safe flow of traffic, vehicular or pedestrian. Safety for the public is our primary consideration.

The Street Division composition for period July 1, 1985 - June 30, 1986 was as follows: Street Superintendent, Street & Sewer Supervisor, Electrical

Supervisor, four (4) Crew Leaders-Maintenance Specialists, two (2) Electricians, two (2) Motor Sweeper Operators, five (5) Maintenance Workers II, two (2) Maintenance Workers I, four (4) Labor III, one (1) Maintenance worker II on disability, for a total personnel strength of twenty three (23). This division was augmented with three (3) works aids during the summer program.

The major maintenance activities conducted by the Street Division are as follows:

1. Travelway Maintenance

- a. A/C Repair - Overlays - Chip Sealcoat
- b. Street Sweeping
- c. Concrete Improvement Repair
- d. Traffic Control
- e. Pavement Delineation
- f. Street Illumination and Electrical Maintenance
- g. Traffic signal light maintenance

2. Wastewater Collection System Maintenance

3. Drainage Maintenance

4. Weed Abatement

5. Stowell and SMTC and Parking District

1. TRAVELWAY MAINTENANCE

a. Asphalt repair, overlays - chip seal; fog seal: The preservation, upkeep and restoration of 335 lane miles or 151 centerline miles (no change from last year) of flexible pavement is the maintenance responsibility of this Division. Travelway maintenance program during fiscal year 1985-86 consisted of placing 1,019 tons of either SC/800 or 85/100 asphaltic concrete on City streets in need of repair. This activity involves the repair of pot holes, water ditches, sewer ditches and renovation of portions of streets in preparation for annual overlays and sealcoat program.

The annual major street maintenance program consisted of placing 7,998/1,087 tons of chips/oil binder on 7,504,506 sq. ft. of pavement and applying 18,674 gallons of dust control on 2,428,620 sq. ft. of chip seal street for a cost of \$361,078.81, and placing of 33,341 gallons of SS1H fog seal on 4,289,409 sq. ft. of pavement for a cost \$31,088.50. Total cost of the street maintenance contract was \$392,167.31

b. Street Sweeping: City residential streets were swept on a bi-weekly schedule with the business area on a daily basis. The two motorized sweepers were operational approximately 489 sweeper days out of 520 sweeper days. The 30.5 days the sweepers were not operating were due to service repair, inclement weather, holidays and compensatory time off. The two sweepers removed and hauled to the landfill 2,272 tons of material swept off the City streets, using 32 pickup brooms and 68 gutter brooms.

c. Concrete Improvement Repair: This activity involved the repair of concrete improvements (sidewalks, curbs and gutters) damaged by the tree roots or City-owned property. The three-man crew completed 48 work orders for a total of 6,340 sq. ft. There were 100 concrete improvement damaged service requests during this period caused either by tree roots, City property (trucks), and/or private property. Temporary repairs continue on all hazardous sidewalk service requests and are made within a very short period of time, in most cases, the same day. Presently, this division has a backlog of approximately 625 known locations of tree root damaged concrete improvements.

d. Traffic Control: This program includes all work performed in signing as a traffic control device. Signs are placed on City streets for the purpose of warning, regulating or guiding traffic. The work may consist of the fabricating, purchase, assembly and installation of new signs; replacement of existing damaged signs and the repair, cleaning and painting of signs. Signs are replaced or repaired when they become defective due to age, weathering, vandalism, accidents or any other types of wear and tear. Following is a summary of this activity:

| <u>Type Sign</u>             | <u>New or<br/>Reinstall Damaged</u> | <u>Reface Sign,<br/>Plate &amp; Reinstall</u> |
|------------------------------|-------------------------------------|-----------------------------------------------|
| Regulatory                   | 107                                 | 418                                           |
| Guide                        | 20                                  | 126                                           |
| Warning                      | 44                                  | 23                                            |
| Neighborhood Watch           | 10                                  | --                                            |
| Special Signs for Other Div. | 103                                 | 188                                           |

Also, 72 barricades were repaired for use by division crews during their normal work activities.

e. Pavement Delineation: The pavement delineation program involved all work necessary to maintain and replace traffic directional street markings. Work included layout, removal of old stripes, painting of new or existing stripes limited parking zones, restriping of pavement lane lines, stencils and parking lines after the annual Street Maintenance Program. This required the use of 1,231 gallons of traffic paint, 2.0 tons of beads, approximately 95 gallons of lacquer and paint thinner.

f. Street Illumination and Electrical Maintenance: Street illumination is a major responsibility of this division and consists of the upkeep of 3,481 street lights, 4% increase over fiscal year 1984-85.

This maintenance operation required the replacement of 593 photo cells, 951 lamps (various sizes) 22 luminaires, and 34 street light standards. Included in this operation is the light maintenance of five City parking lots, Santa Maria Town Center Mall parking lots, parking structure and Stowell Shopping Center parking lot. Also, the maintenance activity includes electrical service, as required, by all departments and their subordinate divisions for installation of new machines, electrical circuits, changes in electrical circuits and electrical repairs.

g. City owned traffic signals maintenance: On December 10, 1985 the Department of Public Works, Street Division Electrical Crew, has undertaken the responsibility of maintaining fourteen (14) City owned traffic signal lights. During this period Electrical Maintenance Personnel have received formal instructions on traffic signal operation and maintenance, and on the job training in conjunction with Cal Trans Traffic Signal Service Personnel Maintenance operations, this approach has been taken to qualify Electrical Crew Members to inspect, maintain, and adjust traffic signals for the purpose of safe and orderly traffic movement at the street intersection.

(1) Noteworthy: To provide continuous and safe flow of traffic in our signaled intersections, coordination has been made with Cal Trans authority to allow the City to request maintenance assistance from Cal Trans in the event of an emergency at a City owned traffic signal; i.e., knock down or major malfunction of City owned traffic signals.

(2) Additional, authorized, communication equipment, (pagers), have been purchased and assigned to Electrical Maintenance Personnel to reduce the response

time to traffic signal malfunction. Call back operation has been coordinated and are initiated through the Police Department, for response, on any time after normal working hours, weekend or holidays. To date there have been 638.5 hours directed to traffic signal maintenance of malfunction reports, and 38 signal lamps replaced.

## 2. WASTEWATER COLLECTION SYSTEM

This activity consisted of immediate response to 152 main line sewer stoppage service request. This is approximately 3% less than 1984-85.

There was preventive wastewater collection system scheduled maintenance on 112,945 lin. ft., a 28% increase over last year. The only areas that received continuous preventive maintenance were known problem areas. There is a total of 121.7 miles of sewer line in the City's system.

## 3. DRAINAGE MAINTENANCE

During fiscal year 1985-86 570 ft. of underground drainage (Enos) were installed bringing the approximate total footage of our underground drainage system to 50,060 ft., an increase of 1% over last year. The underground drainage facilities now in existence has reduced the flooding of intersections on some of our major arterials and other streets. The present maintenance operations include flushing of 110 intersection culverts, grading and weed control of 10 major drainage ditches; this work occurs twice annually with a two-man crew and contract applications of herbicide weed control to 65,340 sq. ft. at a cost of \$355.38.

#### 4. WEED ABATEMENT

The weed abatement program takes most of seven months to complete and is conducted in five phases:

- I Mid-fiscal year for lot inspection
- II Posting lots for herbicide weed abatement
- III Application of herbicide weed control
- IV Posting lots for weed abatement and debris removal, manually and/or with equipment
- V Manual abatement of weeds and cleaning of lots. This phase runs into the following fiscal year.

All phases require the posting and compilation of cost records to assure proper billing for each lot; all of which is forwarded to the City Clerk for the filing of assessment against the property. The herbicide weed abatement program during fiscal year 1985-86 came to a total of 4,279,919 sq. ft. (a increase of 11% from last year) for a cost of \$14,595. The increase is due to vacant lots being developed. The hand cleaning Weed Abatement Program consisted of cleaning 29 lots for a total cost of \$2,400.05. Total cost of Weed Abatement Program for 1985-86 was \$16,995.05

#### 5. STOWELL AND SANTA MARIA TOWN CENTERS AND PARKING DISTRICT

The Stowell and Santa Maria Town Centers landscaping and parking area maintenance is performed by private contractors under the administration of the Street Division. Review for compliance with bid specifications and administration of expenditures in accordance with the contracts are the primary responsibilities. Performance standards are determined by periodic inspections and notifying the contractor of any deficiencies.

The Parking District consists of five existing City-owned public parking lots as follows:

- 1) 100 Blk. West Cypress (mid-block/north side)
- 2) 100 Blk. West Church (mid-block/north side)
- 3) 200 Blk. West Church (mid-block/north side)
- 4) 200 Blk. West Chapel (southeast corner Chapel and Pine)
- 5) 200 Blk. East Main (north side)

Maintenance consists of painting parking spaces, sweeping, pavement repairs and parking lot lights.

Figure 19 depicts man-hours required for various segments of the Street Division maintenance responsibilities. Figure 20 depicts man-hours required for various segments of the electrical maintenance responsibilities of this Division for fiscal year 1985-86.

# CITY OF SANTA MARIA

## DEPARTMENT OF PUBLIC WORKS

### STREET AND SEWER DIVISION

#### EXISTING ORGANIZATION CHART

SUPERINTENDENT  
T. J. GALVAN

SUPERVISOR  
ELECTRICAL

Claborn (1)

SUPERVISOR  
STREETS AND SEWERS

Olivera (1)

TRAFFIC SIG.  
ST. LIGHTING &  
ELECT. MAINT.

ELEC II  
Smith (1)

ELEC I  
Crakes (1)

PARKING

5 CITY  
PARKING LOTS

PARKING AUTHORITY

STOWELL PARKING  
& MAINT AUTHORITY

DRAINAGE

M.W. II  
Flores (1)

SEWER

CL/MS  
Johnson (1)

M.W. II  
Martinez (1)  
Pantoja (6/12)

TRAVEL WAY  
MAINTENANCE

PERM/PT  
Stahl  
Andrade  
Bettiga  
Sarellano

STREET  
SWEEPING

CL/MS  
Cargill (2/12)

SWEEPER OPR.  
Torres (1)  
Ujano (1)

ASPHALT  
MAINTENANCE

CL/MS  
Cargill (6/12)  
M.W. II

Velasquez (10/12)  
Soto (10/12)  
Johnson S (3/12)  
Valadez (8/12)  
Maggio (3/12)

CONCRETE  
MAINTENANCE

CL/MS  
Rivers (1)

M.W. II  
Maggio (3/12)  
Johnson S (9/12)

TRAFFIC  
MAINTENANCE

CL/MS  
Nartatez (1)

M.W. II  
Maggio (6/12)  
Valadez (6/12)

ALLEY  
MAINTENANCE

CL/MS  
Cargill (4/12)

M.W. II  
Velasquez (2/12)

WEED  
ABATEMENT

M.W. II  
Pantoja (6/12)  
Soto (2/12)

WORK AIDES  
(10 weeks)

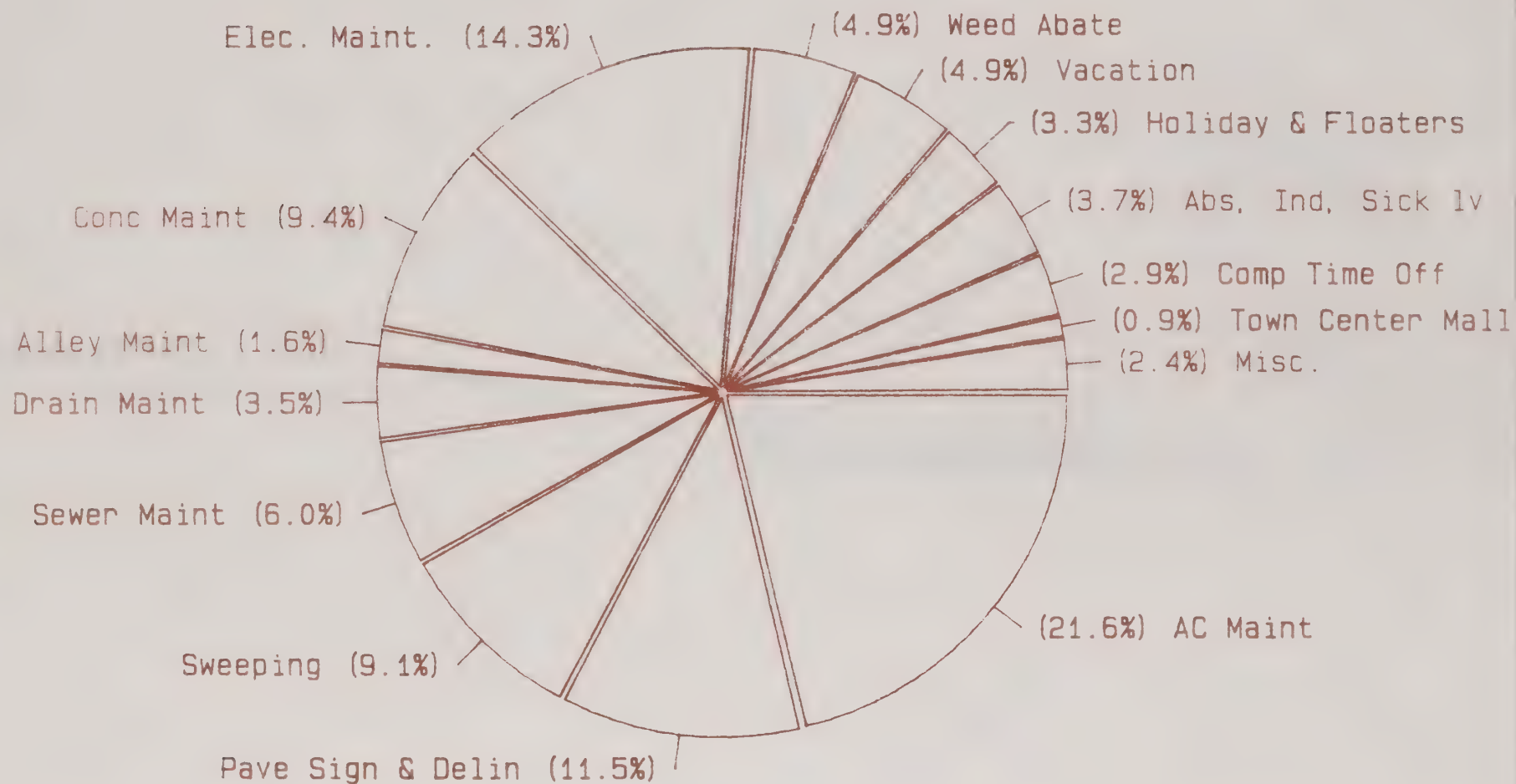


# CITY OF SANTA MARIA

Street and Sewer Division

Manhour Utilization

1985-86



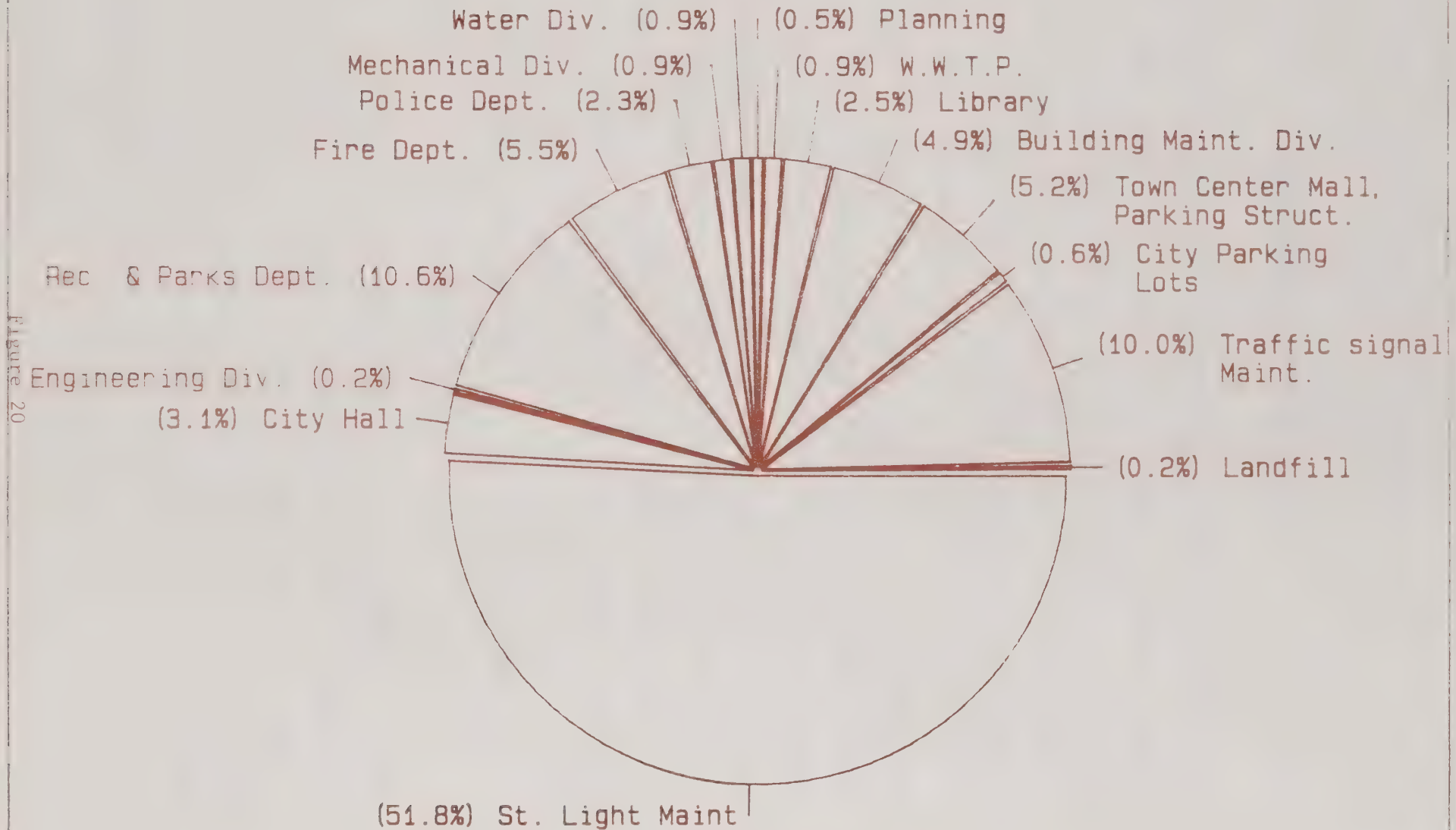
TOTAL MANHOURS 1984-85: 44,639.5

ARSDIVMU



# CITY OF SANTA MARIA

## Street and Sewer Division Electrical Manhour Utilization 1985-86



TOTAL MANHOURS 1984-85: 6,363.0



## WASTEWATER TREATMENT DIVISION

The Wastewater Treatment Plant is located on Black Road approximately 2.5 miles west of Santa Maria. Its purpose is to treat all domestic and industrial waste collected and conveyed by the sewer system at a reasonable cost. The City of Santa Maria has treated and disposed of wastewater at the present site off Black Road since 1910. The treatment plant is designed to serve a population of approximately 54,000. This includes the capacity to treat over 2 MGD of flow from the City's industries. The average daily capacity of 6.5 MGD on an annual basis should be sufficient until mid-1988. The treatment process removes 93% of the suspended solids (ss) and biochemical oxygen demand (BOD) contained in the wastewater. The land disposal system removes an additional percentage of these pollutants and a portion of the nutrients normally found in wastewater including nitrogen and phosphorus. The plant effluent is suitable for irrigation of permanent non-dairy pasture land and fodder crops. Digested sludge averaged 47% volatile reduction. This sludge is dried in earthen beds and can be used as a soil conditioner for crops so specified in the plant's discharge permit.

The plant is maintained and operated by one Superintendent, one Plant Supervisor, one Chemist, one Source Control Inspector and five Operators, (Figure 21). During this past year, Joseph (Roy) Leone received his Grade I operators Certification. All operators are currently certified. The Chemist and Source Control Inspector are certified by the California Water Pollution Control Association (CWPCA).

Plant tours, by students and other interested groups, continue to be given upon request. A total of 23 people toured the plant this fiscal year. Visitors are shown and told about the various components of wastewater treatment used at the plant. Generally, the tours are concluded with a visit to the laboratory where a question and answer session is held.

Bird watching is a regular event at the Wastewater Treatment Plant ponds. A total of 173 bird watchers signed in this past year.

The tests shown in Figure 22 were performed in the wastewater treatment plant laboratory.

Certain tests required by the State Water Quality Control Board were beyond the scope of the plant laboratory. For this reason, Central Coast Analytical Services performed the tests under contract for the annual analysis (heavy metals, MBAS, phenols, polychlorinated byphenyls, and total chlorinated hydrocarbons). The results of these tests aid in plant operation and, in some cases, reflect plant efficiency or indicate where more source control is needed. In addition to the above, BOD and Total Nonfiltrable Residue (TSS) tests were performed on industrial waste discharges to the sewer system as necessary for wastewater strength determinations and charges as required under the wastewater ordinance.

It is noteworthy to make a comparison of statistics on the top of Figure 22 for electrical energy used and gas produced with the previous fiscal year. During 1984-85 1.676 million Kwh or an average of 4,590 Kwh daily electrical energy were consumed. Likewise, during 1984-85, 30.09 million cubic feet or an average of 82,433 cubic feet of gas was produced daily.

## Industrial Source Control - 1985-86

Industrial Source Control has undertaken legal action against an industrial discharger during this fiscal year. This is the first action of this nature to be filed with the City Attorney's office. The complexity of the case (People versus Pentachem Company) has reduced activities in other areas of Source Control. The company has been under a restraining order and without a wastewater discharge permit since October 1984. The Pentachem owners plead no contest at the Penalty Hearing and sentencing is expected by September 15, 1986, with the Civil Case proceeding after the conclusion of the criminal trial sentencing.

Fifty-seven new permits were issued, with ten established permits being granted extensions for up to five years.

Over one hundred and fifty new applications for permits were mailed out to industrial dischargers during October 1985. The majority of applications were received by the close of the fiscal year. Most of these applications were determined to be Class II dischargers and will not be permitted except in those cases where solvents or other chemicals of concern are used on site. These businesses will also be reported to the County Health Department to ensure compliance with hazardous materials regulations.

Inspections of grease, oil and sand traps have continued over the past year. More inspections have resulted from complaints issued to Source Control regarding waste disposal practices by industries. These cases are reviewed and then referred to County Health Toxic Substances or the California Regional Water Quality Control Board when out of Source Control's jurisdiction. The total inspections performed during this fiscal year were ninety.

The Self-Monitoring Report requirements established for the Class IV industries during early 1985-86 have not been fully realized. Simplot Foods, Santa Barbara Research Center, Mission Linen Supply, and Ramsey Laboratories were completing these reports by the close of the fiscal year. Santa Maria Chili is to become self-monitoring during the second half of 1986. The purpose of self-monitoring is to give the industrial discharger a higher recognition of material losses to the sewer and stimulate problem-solving to abate such losses. In addition, self-monitoring relieves Source Control to pursue sampling and analysis of other discharger's waste streams which have not been documented to date.

With the help of a part-time clerk, Source Control Records have been reorganized into a Computer Program. This has required diligence in both the input of information from the files and the review and amendment of the program itself. Also the Source Control Office has been reorganized and forms are utilized in the City's word processing system.

#### Capital Improvement, Revenue and Operation Cost Figures

Capital improvements this fiscal year included the installation of blinds in the lab, alarm system for emergency callout, copier, three-four drawer filing cabinets. Repairs included: replacing water seals in all sludge pumps and repairs to grinders at headworks and thickened sludge pump.

Revenue from vacuum truck and septic tank dumpings at the treatment plant amounted to \$62,410. The increase over last year is due to a 5% fee increase July 1, 1985. The year's total cost for plant operation was \$753,571 which does not include \$133,390 for General Administration Services. During the

fiscal year 1985-86, 1,889,787,500 gallons (5.18 MGD) of wastewater was treated at a maintenance and operations cost of \$398.93 per million gallon (not including general administration).

The cost per million gallons is a 20% increase because of decrease in flow and inflation. Figure 23 shows the comparative measurements of flow and costs of operation over the past ten years. The cost figures do not reflect various capital outlay items during the year or the annual amount reserved for fixed asset replacement (\$470,000).



CITY OF SANTA MARIA  
DEPARTMENT OF PUBLIC WORKS  
WASTEWATER TREATMENT DIVISION  
EXISTING ORGANIZATION CHART

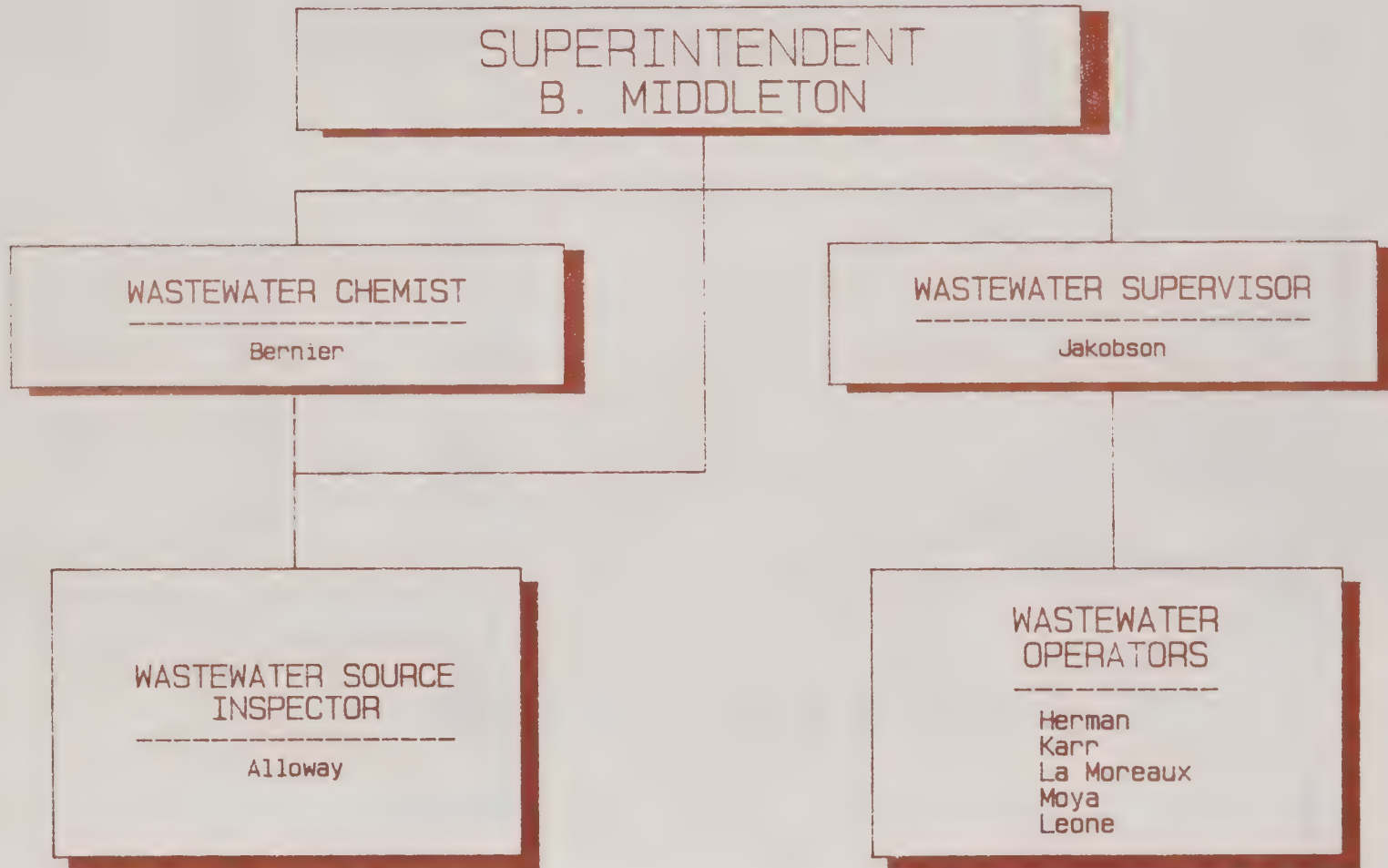


Figure 21



**WASTEWATER TREATMENT PLANT LABORATORY REPORT**  
**FISCAL YEAR JULY 1, 1985 TO JUNE 30, 1986**

Total Flow: 1,889,787,500 gallons  
 Daily Average: 5,177,500 gallons  
 Gas Production Metered: 30,273,022 cu ft  
 Daily Average: 83,026 cu ft

Electricity Used: 1,789,260 KWH  
 Daily Average: 4902 KWH

Laboratory Tests & Averages

| Wastewater Analysis<br>Test Parameters | Influent           |              | Effluent           |              | % Removal                          |
|----------------------------------------|--------------------|--------------|--------------------|--------------|------------------------------------|
|                                        | Number<br>of Tests | Test<br>Ave. | Number<br>of Tests | Test<br>Ave. |                                    |
| Biochemical Oxygen Demand (mg/l)       | 27                 | 250.00       | 52                 | 17.30        | 93.1                               |
| Total Nonfiltrable Residue (mg/l)      | 27                 | 216.00       | 52                 | 15.40        | 92.9                               |
| Conductivity (TDS) micromhos/cm        |                    |              | 346                | 1280.00      |                                    |
| Hydrogen Ion (pH)                      | 345                | 7.80         | 347                | 7.80         |                                    |
| Settleable Solids (ml/l)               | 343                | 10.60        | 343                | Trace        | 99.9                               |
| Dissolved O <sub>2</sub> (mg/l)        |                    |              | 47                 | 5.80         |                                    |
| Grease & Oil (mg/l)                    |                    |              | 52                 | 1.80         |                                    |
| Total Filtrable Residue (mg/l)         |                    |              | 9                  | 1347.00      |                                    |
| Boron (mg/l)                           |                    |              | 6                  | 0.44         |                                    |
| Total Phosphorous (mg/l)               |                    |              | 1                  | 8.60         |                                    |
| Chloride Ion (mg/l)                    |                    |              | 4                  | 309.00       |                                    |
| Sulfate Ion (mg/l)                     |                    |              | 4                  | 328.00       |                                    |
| Total Kjeldahl Nitrogen (mg/l)         |                    |              | 3                  | 13.88        |                                    |
| Nitrogen-NO <sub>3</sub> (mg/l)        |                    |              | 3                  | 5.30         |                                    |
| Chemical Oxygen Demand (mg/l)          | 1                  | 714          | 1                  | 65.00        | 90.9                               |
| Sodium (mg/l)                          |                    |              | 3                  | 241.00       |                                    |
| <u>Sludge Analysis</u>                 |                    |              |                    |              |                                    |
|                                        | Raw Sludge         |              | Digester #1        |              | Digester #3                        |
| Test Parameters                        | Number<br>of Tests | Test<br>Ave. | Number<br>of Tests | Test<br>Ave. | Number<br>of Tests<br>Test<br>Ave. |
| Volatile Acids (mg/l)                  |                    |              | 52                 | 115.00       | 51 100.00                          |
| Alkalinity (mg/l)                      |                    |              | 52                 | 3874.00      | 52 4336.00                         |
| Hydrogen Ion (pH)                      |                    |              | 52                 | 7.20         | 52 7.30                            |
| % Solids                               | 51                 | 5.71         | 49                 | 3.46         | 50 3.11                            |
| % Volatile Solids                      | 51                 | 74.00        | 49                 | 61.36        | 50 60.14                           |

% Volatile Reduction = 47

Heavy metal and organic compound analysis determined by Central Coast Analytical Services.

This report prepared by: Alan Walker

LWWP104

Figure 22



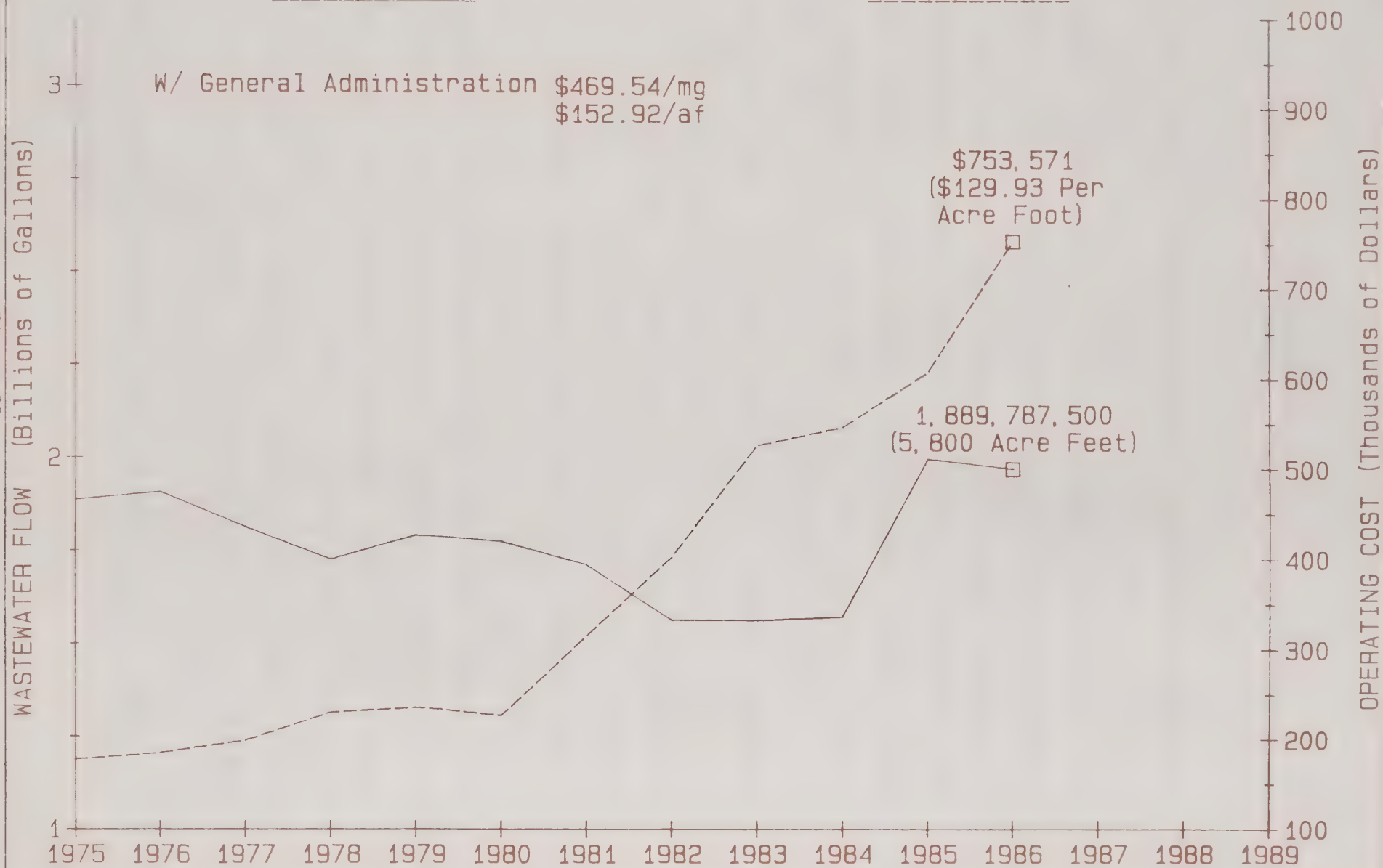
# CITY OF SANTA MARIA

## Wastewater Treatment

FLOW

COST

Figure 23





## WATER DIVISION

### Production

Sixty water samples per month were collected throughout the system by the Water Division personnel for bacteria analysis in compliance with the State Health standards. The analysis in all cases substantiated that the water system is clean. Also as required by State Health standards, tests were performed by the City Water Division on water samples for general minerals-heavy metals, radioactivity, turbidity, THM, color, and odor, all were well within the standards. Repairs were made on three well chlorinator pumps. Technical maintenance was carried out on the automatic well control and pressure control system. The system includes telemetering and electronic components at a headquarters main control panel, a failure alarm system, a sub-panel and several remote stations. The water production capability is comprised of 10 water wells and are located within the Santa Maria Public Airport boundaries, with the exception of two, close to the center of the City. Total production capability with all wells operational, except well 2AS as explained below is approximately 15,000 GPM or 21.6 MGD or 66.4 AFD. The wells furnished an average 9.6 million gallons per day to satisfy the customers' demands. The two ground level and two elevated reservoirs, used in conjunction with the wells, have a total of 15.5 million gallons storage capacity. The 6- and 7-million gallon reservoirs have increased the "elevated" reservoir capacity to 13.0 million gallons. The combined well production and reservoir capacity must also supply such peak demands as 17.35 million gallons per day (highest recorded to this time period) and allow at all times for a reserve fire flow supply. This all amounts to an annual total consumption of approximately 3.5 billion gallons (10,826 AF).

## Distribution

The water distribution section is responsible for transmitting water from the well source to the people. This service is provided to over 13,502 accounts (an increase of 2.5% over last year) through a water line system which is approximately 222 miles long (an increase of .9% over last year). This section also provides the meter reading function, water billing and collection services, installation of service lines, meter maintenance and maintains all water distribution facilities in their entirety. The income from all water sold this fiscal year is shown on the following graph. Totals of various water division functions during the fiscal year 1985-86 are listed as follows:

| <u>Function</u>                                    | <u>No. Completed</u> |
|----------------------------------------------------|----------------------|
| 1. Water meter readings                            | 81,012               |
| 2. Water service turn-ons                          | 1,699                |
| 3. Water service turn-offs                         | 1,838                |
| 4. Collection (delinquent bills)                   | 1,369                |
| 5. Water meter re-reads                            | 3,205                |
| 6. Miscellaneous service calls                     | 1,389                |
| 7. New service line and taps installed             | 165                  |
| 8. Water meters installed                          | 698                  |
| 9. Water meters removed                            | 538                  |
| 10. Water meters repaired in shop                  | 39                   |
| 11. Water meters repaired in field                 | 302                  |
| 12. Renovation of water meter locations            | 115                  |
| 13. Ball valves installed                          | 815                  |
| 14. Water meter vaults installed and replaced      | 232                  |
| 15. Water line leaks repaired                      | 111                  |
| 16. Flushing dead-end stations                     | 0                    |
| 17. Flushing fire hydrants                         | 27                   |
| 18. Fire hydrant repairs, painting and maintenance | 24                   |
| 19. Main line gate valves operated                 | 2,609                |

## Water Quality

On-going monitoring and testing of the City's water system is to assure that the water is of good quality and within the allowable limits of the State Department of Public Health.

1. Chlorination of the source water is applied at each well which carries the chlorine throughout the system and thus a 0.1 p.p.m. residual of free chlorine is maintained in the extremities of the distribution system. This minimum amount of free chlorine is a positive indicator that any pathogenic material that may have entered the system will be killed off by the chlorine exposure.

2. Bacteriological monitoring is accomplished by collecting a minimum of 14 water samples weekly at various locations in the distribution system and tested in the County Health Department Laboratory in Santa Barbara. Again this year, the excellent and continuing bacteriological-free record of the City water system can be attributed to chlorination, flushing of dead-end lines and fire hydrants, and an effective cross connection control program.

3. Ground water source sampling is made on an annual basis for a chemical analysis of each well. These tests show any changes in the water quality relating to mineral content. The average hardness content this past year was 427.0 p.p.m. or 25.0 grains per gallon.

4. Heavy metal analysis of each well source is tested every three years to ascertain that the water is less than the maximum allowed by the United States Public Health Standards and the State of California Department of Public Health requirements for drinking water. Consistently, the water has been within these limits. During 1985, analyses were conducted on Wells 4H,

5AS, 8S, and 9S. Similarly, Wells 3H, 6S, and 7S will be tested during 1986 and Wells 10S, 11S, and 2AS in 1987.

As required by State Health, Well 4H is required to be tested quarterly for PCE (Tetrachloroethene) and (Dichlorodifluoromethane) since recent testing has detected presence, however at less than 4.0 PPB action level.

Also, investigation is continuing on the presence of T.C.E. (Triclorethylene) found in well 2AS which has an action level of 5.0 PPB.

An engineered report was submitted and approved by the State Health Department on November 12, 1985 that would allow a method of blending water from well 2AS with water from our other wells if the need to do so should occur. At this point we have not had to use the blending option and well 2AS has not been in operation. Since this well is shallow, it does not have the proper sanitary seal, and is over 40 years old, replacement has been planned and should occur in 1988.

The CROSS CONNECTION CONTROL PROGRAM is primarily a procedure to protect the public water supply from potential sources of contamination. This refers to any connection that could permit toxic or pathogenic material, or materials objectionable to taste or odor, from entering the public water system.

The following quantities of "backflow prevention" items of work were performed this past year.

| <u>Item</u>             | <u>No. Completed</u> |
|-------------------------|----------------------|
| Installed               | 20                   |
| Replaced                | 27                   |
| Repaired                | 105                  |
| Installation Inspection | 59                   |
| Survey Inspection       | 102                  |
| Informational Services  | 152                  |
| Conferences             | 138                  |
| Correspondence Reports  | 214                  |

Figure 25 is a plot of annual revenue, costs and amount of water production. The cost per acre foot reflects costs of operation and maintenance of the system, overhead, plus repair or replacement of deficiencies in the existing system. No new capital outlay costs or bond service is included in the cost per acre foot.

The continuation of the present level of service to the public during the fiscal year 1985-86 caused the purchase of new water meters at a cost of \$49,813.



**CITY OF SANTA MARIA**  
**DEPARTMENT OF PUBLIC WORKS**  
**WATER DIVISION**  
**EXISTING ORGANIZATION CHART**

**SUPERINTENDENT**  
**J. PERRY**

**PRODUCTION**  
**FIELD SUPERVISOR**

Vacant

**DISTRIBUTION**  
**FIELD SUPERVISOR**

Morse

**PRODUCTION FIELD**  
**SUPERVISOR ASSIST.**  
**CL/MS**

Madison 4/12

**ELECTRICAL**  
**FIELD SUPERVISOR**

Claborn 2.5/12

**SERVICE**  
**CREW**

CL/MS  
 Madison 1/12

**SERVICE**  
**CREW**

CL/MS  
 Wright (M.W. II)  
 Barnette 1/12  
 Edgington 2/12  
 Boyle 3/13  
 Gerletti 3/12  
 (M.W. I)  
 Ortiz 1/12  
 Rose 1/12  
 Hossli 1/12

**SERVICE**  
**CREW**

CL/MS  
 Macy (M.W. II)  
 Barnette 2/12  
 Boyle 2/12  
 Edgington 2/12  
 Gerlette 3/12  
 (M.W. I)  
 Ortiz 2/12  
 Rose 2/12  
 Hossli 2/12

**METER REHAB.**  
**METER READER**  
**FIRE HYDRANT**  
**DEAD END**  
**BLOW OFFS**

(M.W. II)  
 Edgington 4/12  
 Barnette 4/12  
 Gerletti 4/12  
 Boyle 4/12  
 (M.W. I)  
 Ortiz 4/12  
 Rose 4/12  
 Hossli 4/12

**SERVICE**  
**CREW**

CL/MS  
 Cargill (M.W. II)  
 Edgington 4/12  
 Barnette 2/12  
 Boyle 3/13  
 Gerletti 2/12  
 (M.W. I)  
 Ortiz 2/12  
 Rose 2/12  
 Hossli 2/12

**VALVE**  
**SERVICE**  
**CREW**

CL/MS  
 Madison 7/12

**METER**  
**REPAIRER**

Bryant

**CUSTOMER**  
**SERVICE**  
**WORKER**  
**OFFS & ONS**

(M.W. II)  
 Barnette 3/12  
 (M.W. I)  
 Ortiz 3/12  
 Rose 3/12  
 Hossli 3/12



# CITY OF SANTA MARIA

## WATER DIVISION

ANNUAL WATER PRODUCTION

DELIVERED COSTS

SALES REVENUE

Production

Costs

Revenue

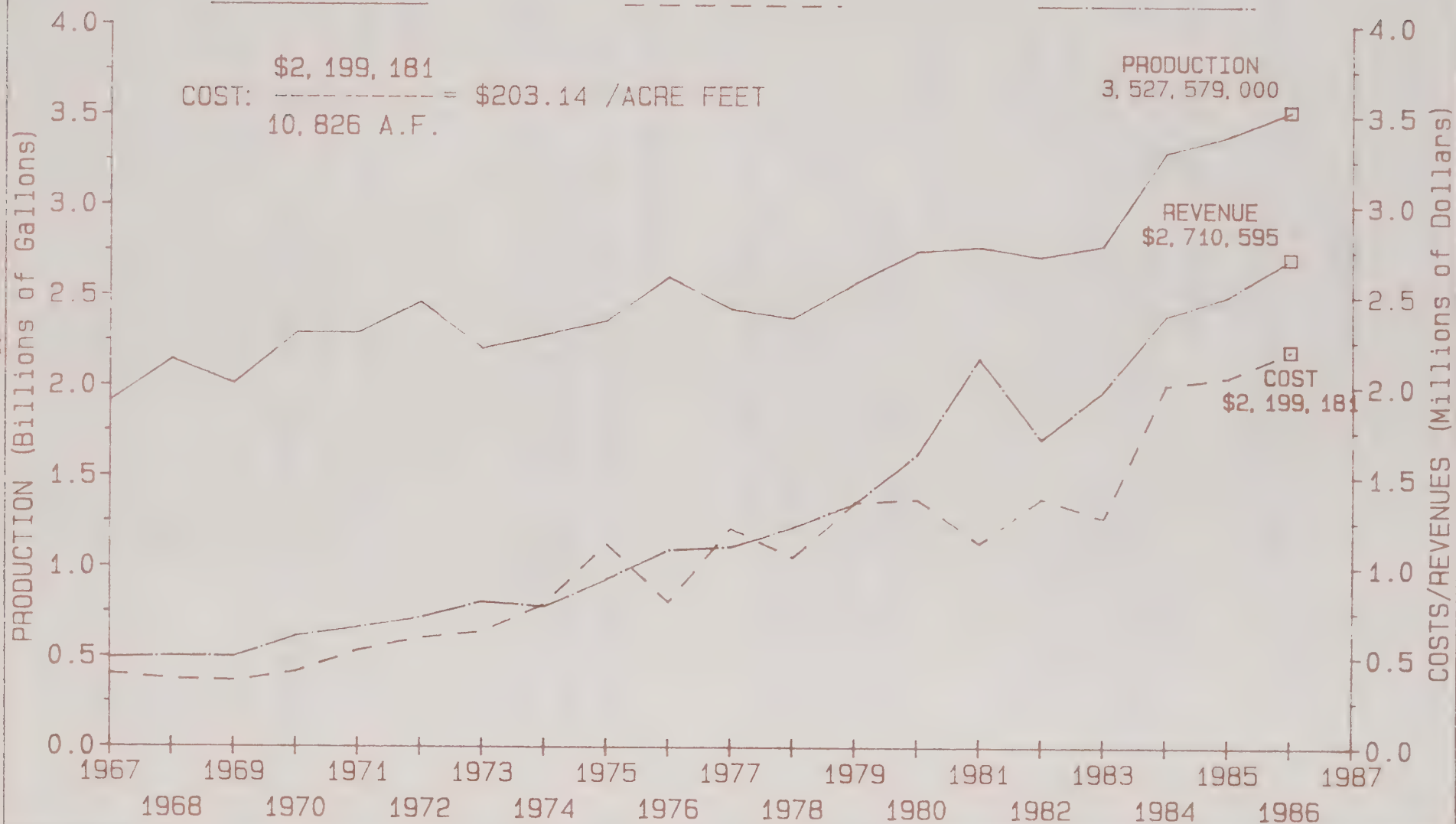


Figure 25



## APPENDIX A

### ENGINEERING, OPERATIONS AND ADMINISTRATIVE STUDIES

#### Standard Specifications and Standard Drawings

The standard specifications and drawings are available through this office and have been updated and revised through this year. These specifications and drawings indicate typical approved methods and materials for all types of Public Works construction.

#### Four-Year Capital Improvement Program

Along with each of the City departments, the Public Works Department developed recommendations for capital improvements deemed desirable over the next four years. This information, after coordination with other departments and comparison with our financing capabilities by the Administrator's office, resulted in the separate published capital improvement program.

#### Engineering Division Forms and Checklist

The Engineering Division has developed standardized forms to aid in the consideration and evaluation of subdivision maps and public improvement drawings. These standardized forms are evaluated and revised on a continuing basis throughout the year.

#### Westside Redevelopment

Fiscal year 1985-86 saw little active involvement by this division with the Phase II portion of the Westside Redevelopment. This was primarily due to the absence of any construction activity within the Phase II area. Phase II covers a four block area bounded by Pine, Church, Broadway and Cook Streets and is planned to be an addition to the Town Center Mall.

The bulk of the active work on Phase II during the 1985-86 fiscal year has been carried on by the City of Santa Maria Redevelopment Agency staff. They have been acquiring the necessary properties and working with various consultants and developers to arrive at a final design. This department's role

during this period has been limited to providing assistance to consultants working on the project and advising the redevelopment agency on technical questions.

Public Works anticipates a more active role in the 1986-87 fiscal year as building demolition and the construction of public improvements commence.

### Sewer Basin Study

The City's consultant, John Carollo Engineers, continued their analysis of the City's sewer system during the 1985-86 fiscal year.

The City's sewer system is divided into eight definable areas referred to as "Basins" these eight basins are as follows:

1. Blosser
2. McElhany
3. Fesler
4. Cook - Orange
5. Morrison
6. Enos
7. Inger
8. McCoy

During 1985-86 Carollo analyzed basins numbered 1 to 5 above. Basins numbered 6 to 8 had been analyzed the previous fiscal year.

The consultant's work consists of estimating the ultimate sewage flow that could be expected based on the present land use designations in a particular basin and comparing that to the capacity of the existing sewer system serving that basin. Data gathered is entered onto a computer program and the program printout allows City staff to identify system deficiencies. The size and routing of additional sewer lines can be planned together with the associated financing considerations.

### Santa Maria Area Transit Annual Report 1985-86

#### Summary

The ending fourth quarter statistics for the fixed route system reflected a reduction in operating costs and resulting improvements in the various performance indicators. The reduction in operating cost was a result of the reduction of service hours initiated on March 1, 1986.

With the first year experience of the new fixed route system the City Staff will review and make adjustments until the comprehensive study by Crain and Associates will be completed by November, 1986. This study will analyze and make recommendations on improving the total transit system to meet the required fare box ratios (FBR) and transportation needs of the urbanized area.

Staff has also applied to the APC for an exemption of the required FBR of 20% for fiscal years 1985-86 and 1986-87. The 2-year exemption in State regulations allows transit providers, who expand service by 50% or more, sufficient time to regain fare revenues.

The demand response and health service continue to operate in a satisfactory manner. In order to meet the increasing list of clients for demand response service an additional vehicle is being purchased the latter part of fiscal year 1986-87.

#### Operations

The day to day operating aspects of the SMAT system continued with a fleet of eleven vehicles with no major interruptions in service. The City currently has an application for federal funds to replace three high mileage vehicles and purchase an additional vehicle for the demand response system.

Approval of the federal funding is expected by November, 1986 and the new vehicles will be ordered shortly thereafter. The method of reporting the number of passengers on previous statistical reports was revised to include all categories. Future reports will include a breakdown of General, Elderly and handicapped, transfers, students and free riders. The time consuming compilation of passenger counts will hopefully become easier with the use of micro-computer applications now being planned for transit operations.

The following table compares the system statistics for 1985-86 with those of the previous year:

### Fixed Route System

|                                                                  | <u>FY 84-85</u> | <u>FY 85-86</u> | <u>Change</u> |
|------------------------------------------------------------------|-----------------|-----------------|---------------|
| Number of Passengers                                             | 84,876.00       | 120,868.00      | +42.0%        |
| Operating Miles                                                  | 239,816.00      | 390,721.00      | +63.0%        |
| Operating Hours                                                  | 14,089.00       | 18,102.00       | +28.0%        |
| Passengers/Service Hours                                         | 6.02            | 6.67            | +11.0%        |
| Ratio - Fare Box Revenue to<br>Operating Cost                    | 15.9%           | 11.4%           | -26.0%        |
| Ratio - Local support and fare<br>box revenue to operations cost | N/A             | 15.1%           | N/A           |

### \* Demand Response

|                                                | <u>FY 84-85</u> | <u>FY 85-86</u> | <u>Change</u> |
|------------------------------------------------|-----------------|-----------------|---------------|
| Number of Passengers                           | 12,342.00       | 13,146.00       | + 6.0%        |
| Operating Miles                                | 52,203.00       | 55,050.00       | + 5.0%        |
| Operating Hours                                | 4,016.00        | 4,032.00        | 0.0%          |
| Passengers Per Service Hours                   | 3.07            | 3.26            | + 6.0%        |
| Ratio - Fare box Revenue to<br>Operating Costs | 10.01%          | 10.06%          | + 5.0%        |

\*Restricted to elderly and handicapped includes Guadalupe service.

### Special Health Services

|                                                 | <u>FY 83-84</u> | <u>FY 84-85</u> |
|-------------------------------------------------|-----------------|-----------------|
| Number of Passengers                            | 1,547           | 1,745           |
| Operating Miles                                 | 19,278          | 21,144          |
| Ratio of Fare Box Revenue<br>to operating costs | 22.07%          | 20.06%          |

\* Service is funded by Santa Maria, County, Guadalupe and Lompoc.

The total system had 135,759 passengers compared to 98,765 for the previous

### Administrative

The SMAT system has been a continuous challenge and learning process for the City staff since the beginning in 1976. The process of providing transportation under the various state and federal (funding) regulations has evolved into a specialized City service with increasing staff involvement.

With the experience of the past fiscal year the City and APC staffs will now re-evaluate SMAT and determine the best direction to continue transit service. The study by Crain and Associates will be a big factor in the evaluation.

The City is now waiting approval by UMTA for operating assistance in the amount of \$200,000 and capital assistance in the amount of \$227,200 for fiscal year 1985-86. Available funding assistance for 1986-87 fiscal year has yet to be determined by UMTA. Indications are that Federal Operating Assistance may be cut by 20% for urban areas. This department has also been notified by APC that STA funds for 1986-87 will not be available for fiscal year 1986-87. This amounts to approximately \$87,000 for the City.

The anticipated reduction of State and Federal funding for operating assistance will also be considered in the staff's upcoming SMAT evaluation. Methods to reduce costs, increase efficiency and productivity will be more evident in future staff reports. A new document by the APC staff, Service Plan 1986-87, outlines the planning and management strategies that staff will implement. This report recommends several cost reduction measures.

Agreements for operating and funding SMAT with SMOOTH and other agencies will be submitted in the near future.

SANTA MARIA AREA TRANSIT ANNUAL REPORT  
OF OPERATIONAL STATISTICS

1985-86 FISCAL YEAR

| <u>Statistics by SMOOTH</u>             | <u>Fixed Route System</u> | <u>Demand Response</u> |
|-----------------------------------------|---------------------------|------------------------|
| A. Vehicle Service Miles                | 390,721.00                | 55,050.00              |
| B. Number of Passengers                 | 120,868.00                | 13,146.00              |
| C. Total Schedule Vehicle Service Hours | 18,102.00                 | 4,032.00               |
| D. Fares                                | \$ 62,838.00              | \$ 9,528.00            |
| Local Support                           | 20,714.00                 | 2,918.00               |

Dept. of Public Works Work Area

|                                                        |              |              |
|--------------------------------------------------------|--------------|--------------|
| E. Operating Cost                                      | \$552,261.00 | \$ 93,187.00 |
| F. Operating Cost per Passenger                        | \$ 4.57      | \$ 7.09      |
| G. Operating Cost per Mile                             | \$ 1.41      | \$ 1.69      |
| H. Operating Cost per Vehicle Service Hour             | \$ 30.51     | \$ 23.11     |
| I. Passengers per Vehicle Service Hour                 | \$ 6.68      | \$ 3.26      |
| J. Ratio - Fare Box Revenue to<br>Operating Cost       | <u>11.4%</u> | <u>10.2%</u> |
| K. Ratio - Fare and Local Support to<br>Operating Cost | <u>15.1%</u> | <u>13.4%</u> |

Special Health Services

|                                                    |              |
|----------------------------------------------------|--------------|
| Fares                                              | \$ 4,843.00  |
| Local Support                                      | 1,121.00     |
| Operating Cost                                     | 24,399.00    |
| Ratio-Fare Box Revenue to<br>Operators Cost        | <u>19.9%</u> |
| Ratio Fares and Local Support to<br>Operating Cost | <u>24.4%</u> |

# SMAT OPERATIONAL STATISTICS

1985-1986 FISCAL YEAR

## FOURTH QUARTERLY REPORT

| <u>Statistics by SMOOTH</u>              | <u>Fixed Route System</u> | <u>Demand Response</u> |
|------------------------------------------|---------------------------|------------------------|
| A. Vehicle Service Miles                 | 93,134.00                 | 13,817.00              |
| *B. Number of Passengers                 | 32,195.00                 | 3,371.00               |
| C. Total Scheduled Vehicle Service Hours | 4,235.00                  | 1,024.00               |
| D. Fares                                 | 15,863.00                 | 2,340.00               |

### Dept. of Public Works Work Area

|                                               |              |              |
|-----------------------------------------------|--------------|--------------|
| E. Operating Cost                             | \$130,871.00 | \$ 22,256.00 |
| F. Operating Cost per Passenger               | \$ 4.06      | \$ 6.60      |
| G. Operating Cost per Mile                    | \$ 1.41      | \$ 1.61      |
| H. Operating Cost per Vehicle Service Hour    | \$ 30.90     | \$ 21.73     |
| I. Passengers per Vehicle Service Hour        | 7.60         | 3.29         |
| J. Ratio - Fare Box Revenue to Operating Cost | 12.01%       | 10.05%       |

### Special Health Services

|                                                |          |
|------------------------------------------------|----------|
| Fares                                          | 1,462.00 |
| Operating Cost                                 | 5,620.00 |
| Ratio of Fare Box Revenue to<br>Operators Cost | 26.00%   |

\* Indicates total of: Regulars, elderly and handicapped, students and non-paying

## Santa Barbara County State Water Project Alternatives

This report was completed in April 1985 and was jointly funded and prepared by the Department of Water Resources (D.W.R.) and the Santa Barbara County Flood Control and Water Conservation District assisted by a Management Committee and a Technical Committee composed of representatives from the various water districts and cities in Santa Barbara County and Vandenberg Air Force Base.

The report describes the investigation that was conducted to analyze local water project options that could be funded under the Department's "Revised Guidelines on Funding Local Water Supply Projects for Inclusion in the State Water Project." The local water projects would be alternatives to the County's direct use of State Water Project water delivered via the Coastal Branch of the California Aqueduct. The report describes a number of alternatives which include combinations of local water projects and different sized versions of the Coastal Branch that would help resolve Santa Barbara County's water supply problems.

As a follow up to this report, the City Council at their 5/7/85 meeting scheduled special public meetings on the subject of water for the City and Santa Maria Valley for subsequent months. The following is the meeting schedule and general subject matter.

- |    |                     |                            |
|----|---------------------|----------------------------|
| 1. | 05/28/85            | Basin Overdraft            |
| 2. | 06/25/85            | Deteriorating Water Supply |
| 3. | 07/23/85            | Alternatives and Solutions |
| 4. | 08/27/85            | Financing                  |
| 5. | 10/15/85 & 12/03/85 | Decisions                  |

Briefly, the City Council's decision by approving Resolution No. 85-947 on 12/03/85 resulted in the following:

- a) support start of preliminary design and environmental review of the Coastal Branch Aqueduct.
- b) urge other affected entities to also support.
- c) authorized staff to request additional state water entitlement if needed.
- d) approved water rate increase to start accumulating funds for locally responsible facilities to implement delivery of state water.

It is anticipated that the preliminary design and environmental review process by DWR will take approximately 2-3 years to complete.

### Automation vs. Manual Refuse Collection System

Following the Budget Committee's review of the Solid Waste Collection Budget (11-51) for 1986-88 and realizing a substantial rate increase would be eminent due to a deficit budget, the Budget Committee authorized staff to research alternative residential collection methods/systems other than what is presently practiced.

The City is forced to look at ways to curb costs, increase employee productivity, reduce job related injuries (thereby increasing employee longevity), reduce sick leave usage, operate a more efficient type of refuse collection system, and continue the high level of service the community expects.

After thorough research, Automated Collection of residential solid waste was felt to be the most productive and economical with no increase in service rates required, and yet maintain the high level of service at twice per week.

The City's current **MANUAL SYSTEM** is merely the use of physical exertion to drag, lift, and empty refuse containers into the collection truck. The **AUTOMATED SYSTEM** is a fully mechanized operation with the truck doing all the work. The driver remains inside the truck cab at all times. To operate the automated truck, the driver just pushes buttons to activate the mechanical arm as well as the container grasping jaws. The dumping procedure is also performed by the driver from the inside of the truck cab, all mechanically.

The present system allows two 32-gallon cans serviced two times/week, thereby allowing a total of 128 gallons of refuse. Use of the 90 gallon automated container will actually increase the service per residence from 128 to 180 gallons, with the resident having the satisfied feeling of an increased service level by 52 gallons of storage space at no additional cost.

Experience by other entities has confirmed that the automated system is highly more productive and less costly to operate than the manual systems due to the truck performing all the work in a 12-30 second per stop time cycle; the manual systems are usually double this time.

Collection productivity rates (as determined by other entities plus confirmed by a reputable contractor, Turn Key Container Systems) illustrates automated equipment can collect 150-190 homes per hour; the manual system collects approximately 100 homes on a limited service schedule. Automation clearly saves cities money because of the increased productivity factor; fewer routes, personnel, and equipment are required.

The automated system provides all of the above as well as additional benefits to the community, namely;

- 1) Eliminates expense of container replacement costs to the resident (however, upon experiencing a continuing excess of refuse, residents may request a second container at a nominal fee);
- 2) Eliminates animal caused litter due to container size and fixed hinge overlapping lid, thereby creating a more pleasing and cleaner neighborhood;
- 3) Reduces wind blown litter;
- 4) More pleasing neighborhood appearance due to the uniform containers placed at curbside instead of various quantity and size containers, as well as bags, placed at curbside;
- 5) Reduces conflicts between residents and crews since the operator remains in the truck at all times;
- 6) Permits tighter time schedules and dependability of collection;
- 7) Reduces property damage to curbs, lawns, etc.

The report evaluated the following alternative residential collection systems.

Alternative A - One time/week Manual System  
Alternative B - One time/week Fully Automation  
Alternative C - Two times/week Fully Automation  
Alternative D - Two times/week Manual System (Present)

Following are the pertinent financial aspects of the staff recommended Alternative C (Two times/week Fully Automated) conversion:

| <u>Estimated Available Funds</u>       |                |
|----------------------------------------|----------------|
| Automation Savings Over Present System | \$ 804,190     |
| Equipment Replacement Fund Balance     | 390,000        |
| Sale of Existing Fleet                 | <u>235,000</u> |
|                                        | \$ 1,429,190   |

Automation Conversion Costs

|                                                                                                      |                |                  |
|------------------------------------------------------------------------------------------------------|----------------|------------------|
| Equipment - 6 trucks @ \$80,000                                                                      | \$ 480,000     |                  |
| Containers- 11,400 accts. @ \$60                                                                     | <u>684,000</u> | <u>1,164,000</u> |
| Probable & Estimate of Fund Balance<br>after Conversion Accomplished & Sale<br>of Existing Equipment |                | \$ 265,190       |

Options to purchase containers are:

- 1) Outright Purchase or
- 2) Lease Purchase Arrangements over Period of Years

The above staff proposal is contained in the 1986-88 budget request and is currently being considered by City Council at this time.



**APPENDIX B  
FINANCIAL INFORMATION**

**FISCAL YEAR EXPENDITURES**

| FUNCTION               | OVERHEAD  | OPERATIONS | CAPITAL OUTLAY | BOND SERVICE | FUND SOURCE(S)              |
|------------------------|-----------|------------|----------------|--------------|-----------------------------|
| ADMINISTRATION         |           | \$ 183,244 |                |              | General 142,314             |
|                        |           |            |                |              | Water 15,220                |
|                        |           |            |                |              | Refuse-Collection 11,760    |
|                        |           |            |                |              | Refuse-Disposal 6,440       |
|                        |           |            |                |              | Sewer 7,510                 |
| BUILDINGS              |           | \$ 405,614 | \$ 20,805      |              | General 328,129             |
|                        |           |            |                |              | Water 36,540                |
|                        |           |            |                |              | Refuse-Collection 28,240    |
|                        |           |            |                |              | Refuse-Disposal 15,470      |
|                        |           |            |                |              | Sewer 18,040                |
| ENGINEERING            |           | 483,312    |                |              | General 354,452             |
|                        |           |            |                |              | Water 45,680                |
|                        |           |            |                |              | Refuse-Collection 35,300    |
|                        |           |            |                |              | Refuse-Disposal 19,330      |
|                        |           |            |                |              | Sewer 22,550                |
| STREETS                |           | 2,043,251  | 194,375        |              | Gas Tax 6,000               |
|                        |           |            |                |              | General 847,525             |
|                        |           |            |                |              | Gas Tax/TDA 1,390,101       |
|                        |           |            |                |              | Sewer 147,552               |
|                        |           |            |                |              | Sewer 1,595,458             |
| SEWERS                 |           | 132,432    |                | \$ 15,120    | Refuse-Collection 1,566,766 |
| WASTEWATER             | \$133,390 | 774,707    | 687,361 (D)    |              | Refuse-Disposal 850,939     |
| SOLID - COLLECTION     | 207,650   | 1,349,127  | 9,989          |              | General 56,774              |
| WASTE - DISPOSAL       | 116,430   | 704,241    | 19,068         | 11,200       | Water 2,277,553             |
| DRAINAGE               |           | 56,774     |                |              | Equipment 1,856,876         |
| WATER                  | 297,660   | 1,697,068  | 260,145 (D)    | 22,680       | District 2,683              |
| MECHANICAL MAINTENANCE |           | 1,336,257  | 520,619 (D)    |              | Maintenance District 18,807 |
| PARKING DISTRICT       |           | 2,683      |                |              | General 1,811,883           |
| STOWELL CENTER         |           | 18,807     |                |              | Trans. Devp. Act 445,432    |
| PARKING AUTHORITY      |           | 231,085    |                | 1,580,798    | UMTA 272,861                |
| SMAT                   |           | 669,847    | 48,446 (D)     |              |                             |

NOTE: The above information should not be used as final audit figures but are reasonably accurate for the purpose of this summary.

(D) Depreciation



## APPENDIX C

### PERSONNEL NOTES

The total number of employees working in the Public Works Department in all divisions during fiscal year July 1, 1985 to June 30, 1986 was 116. Included in this figure were 94 permanent full-time employees working 40 hours/week, 10 permanent part time employees working 32 hours/week, and 12 part time employees working less than 20 hours/week.

The number of permanent full time positions vacated in the department as a result of employees who either retired or left the City for personal reasons consisted of the following:

|                          |                |           |          |
|--------------------------|----------------|-----------|----------|
| 1 - Water Superintendent | Jesse D. Smith | Retired   | 12/31/85 |
| 1 - WWTP Chemist         | Dennie Bernier | Left City | 04/12/86 |

The above constitutes a turnover rate of 1.7% for all full time employees who left the Public Works Department during the fiscal year. In addition to the departure of the above employees, there has been the normal turn over in the part time employee category.

On August 19, 1985, John K. Fair was appointed to the Assistant Director of Public Works position vacated by the resignation of Jeffrey S. Sinn who accepted employment with the City of Fountain Valley. John previously was an Associate Civil Engineer on the City of Clovis Public Works Department staff and comes to us with over ten years of municipal engineering experience.

Jesse Smith, "Smitty", Water Superintendent of the City of Santa Maria Public Works Department announced his retirement effective December 31, 1985. Smitty's tenure with the City spans over 36 years of which the most recent 17 years he served as head of the Water Division in the Public Works Department. Smitty first started with the City on July 11, 1949, as a laborer in the Street Division. In 1950 he became an employee in the Water Division. Smitty was promoted to foreman of the production section in 1957 and subsequently to

head of the Water Division in 1968. Over the period of years of Smitty's employment, many changes occurred in the City's water system. Major transmission lines, elevated storage reservoirs and a number of wells were added to the water system to keep pace with the service demands of the community. This is demonstrated by the fact that during Smitty's employment, the City's population increased from approximately 10,000 to 48,000 and the daily average water consumption increased from 1.8 million gallons per day to 9.5 million gallons per day. We wish Smitty and his family best wishes in his retirement and commend him for his many years of dedicated City service.

On April 26, 1986, James J. Perry was appointed to the Water Superintendent position. Jim was previously the water production supervisor of the Water Division, which has the primary responsibilities of production and distribution of water to the customers in the city service area. Also, during the vacancy period caused by retirement, Jim served as Acting Superintendent. Jim started his employment with the City's Water Division in 1962 and acquired the production supervisor position in 1970. Recruitment for this position included many applicants from within as well as outside the state.

In addition to the 116 employees mentioned previously, the City Public Works Department participated in an annual Summer Work Aide Program and Neighborhood Youth Corps Program. The Summer Work Aide Program provided training for a total of 10 high school age young adults in the following areas:

- 2 - Building Maintenance
- 1 - Engineering Division
- 3 - Street Division
- 2 - Water Division

10 - Total

The Neighborhood Youth Corps Program provided training for 12 students, which is financially supported by State funds to provide work experience and financial aid. Those divisions supporting this program were as follows:

- 3 - Building Maintenance
- 9 - Solid Waste Division

12 - Total

# EMPLOYEE ROSTER

DIRECTOR OF PUBLIC WORKS  
REESE N. RIDDIOUGH

ASSISTANT DIRECTOR OF PUBLIC WORKS  
JOHN K. FAIR

## ADMINISTRATIVE

### PERSONNEL

Albright, Kathy  
Baichtal, Amy  
\*\*Gray, Sherra

## STREETS & SEWERS

### SUPERINTENDENT

Galvan, Tony

### SUPERVISOR

Claborn, Dale  
Olivera, Ted

### PERSONNEL

\*\*Andrade, Nash  
\*\*Bettiga, Jeff  
Cargill, John  
Crakes, Tom  
Flores, Henry  
Johnson, Robert  
Johnson, Steve  
Maggio, Marvin  
Martinez, Mario  
Nartatez, John  
Pantoja, Anthony  
Rivera, Florante  
Smith, Ron  
Soto, Percy  
\*\*Stahl, Craig  
Torres, Jesse  
Ujano, Robert  
Valadez, Fernando  
Velasquez, Dario

## BUILDINGS

### SUPERINTENDENT

Anderson, Norman

### PERSONNEL

\*Almaguer, Tony  
\*Barber, Beaty  
\*Cossa, Gary  
\*\*Galvan, Jr., Tony  
\*\*Guerrero, Mario  
\*Harper, Kathy  
Johnson, Roy  
Marsh, Harold  
\*Martinez, John  
\*Real, George  
\*Robinson, Robert  
Roth, Robert  
\*Rush, Sue  
\*Salgado, Joe  
Stockton, Loy  
\*Velasquez, Ofelia

## ENGINEERING

### PERSONNEL

Diaz, Lee  
\*\*France, Gary  
Kirkpatrick, Mike  
Palato, Carman  
Pantoja, Henry  
Rios, Jr., Harold  
Rubio, Dave  
Soares, Herbert  
Ujano, Lorenzo  
Wall, Robert  
Zuspan, John

## SOLID WASTE

### SUPERINTENDENT

Noble, Bill

### SUPERVISOR

Brown, Billy  
Montes, Albert

### PERSONNEL

Anaya, Ernest  
\*\*Astorga, Manual  
Brown, Lewis  
Carrell, Bryan  
Coleman, Sheryl  
Cyr, William  
Flores, Ruben  
Hernandez, Rudy  
Knopf, Mike  
Leerskov, Diana  
Lester, William  
Limon, Arthur  
Lodes, Lance  
Lopez, Silvestre  
Medrano, Ronald  
Meriot, Francis  
Moreno, Mark  
\*\*Reyes, Miguel  
\*\*Rodriguez, Mark  
Sanchez, Gregory  
Shearer, William  
Torres, Joe

## WATER

### SUPERINTENDENT

Perry, James

### SUPERVISOR

Morse, Carmel  
Vacant

### PERSONNEL

Barnette, Ralph  
Boyle, Ralph  
Bryant, Wayne  
Cargill, Jim  
Edgington, Rick  
Gerletti, Marvin  
Hossli, David  
Macy, Steve  
Madison, Melvin  
Ortiz, Daniel  
Rose, Brett  
Wright, Frank

\* Part Time

\*\*Permanent Part Time

## WASTEWATER TREATMENT

### SUPERINTENDENT

Middleton, Ben

### SUPERVISOR

Jakobson, Russell

### PERSONNEL

Alloway, Anne  
Bernier, Dennie  
Herman, Gary  
Karr, Paul  
LaMoreaux, Tom  
Leone, Roy  
Moya, Mark

## MECH. MAINT.

### SUPERINTENDENT

Ramirez, Hank

### SUPERVISOR

Merino, George

### PERSONNEL

Azcarate, Larry  
Boyd, Dean  
Bracamonte, Dan  
\*Castillo, Saul  
Galvin, Robert  
Harmon, Mark  
Hart, George  
Janikowski, Mike  
\*Lopez, David  
Mathews, Robert  
Martin, Jerry  
Wolf, Marcelino

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